# Chapter 1000: GUIDELINES FOR MUNICIPAL SHORELAND ZONING ORDINANCES

PREFACE: The Mandatory Shoreland Zoning Act, 38 M.R.S.A., <u>sSections</u> 435-449, requires all municipalities to adopt, administer, and enforce ordinances which regulate land use activities within 250 feet of great ponds, rivers, freshwater and coastal wetlands, <u>including alland</u> tidal waters; and within 75 feet of streams as defined. The Act also requires the Board of Environmental Protection to establish minimum guidelines for such ordinances. This document, adopted by the Board on February 14, 1990 and amended July 14, 1992, August 7, 1994, February 6, 1999, <u>and February 13-, 2000 and May 1, 2006</u> contains those guidelines for municipal shoreland ordinances. The Act requires that municipalities adopt shoreland zoning ordinances consistent with, or no less stringent than, those minimum guidelines.

Municipalities need not adopt this guideline ordinance word for word. In fact, the Department of Environmental Protection (Department) encourages municipalities to consider local planning documents and other special local considerations, and to modify this ordinance into one that meets the needs of the particular community. Municipalities may wish to adopt more stringent ordinances, or ordinances which are completely different from the guidelines, provided that such ordinances, are equally or more effective in achieving the purposes of the Act. In addition, coastal communities must address the coastal management policies cited in 38 M.R.S.A.; section 1801.

When a municipality determines that special local conditions within portions of the shoreland zone require a different set of standards from those in the minimum guidelines, the municipality shall document the special conditions and submit them, together with its proposed ordinance provisions, to the <u>Commissioner of the Department</u> Department for review and approval. No amendment to an ordinance which <u>ea</u>ffects the shoreland zone is valid without the approval of the Commissioner of the <u>Department</u>.

Neither this "Preface" nor the "Notes" contained in this model ordinance are official parts of the ordinance and should not be incorporated into a municipality's locally adopted ordinance. The Preface and Notes are provided for explanatory purpose only.

Municipalities must be aware that in addition to the requirements of the Mandatory Shoreland Zoning Act, the requirements of the Comprehensive Planning and Land Use Regulation Act (30-A M.R.S.A., Chapter 1878, <u>sSections</u> 4312-4349) will be an integral part of a municipality's overall strategy for managing future development. For example, parts of a municipality's shoreland area may be designated as an area for growth while others will be designated as rural or slow growth areas.

In many situations, the shoreland zoning ordinance will be an effective tool for implementing the goals and policies of a municipality's comprehensive plan. A municipality may choose to integrate the shoreland zoning requirements into a town-wide zoning ordinance or choose to have a separate shoreland zoning ordinance. Regardless, the shoreland zoning provisions should form an integrated approach to managing growth as well as fulfilling the requirements of the Mandatory Shoreland Zoning Act.

For more information on the Growth Management Program, please contact your regional council or the State Planning Office, 38 State House Station, Augusta, Maine 04333.

For more information on the shoreland zoning law, please contact the Department of Environmental Protection's Shoreland Zoning Unit, 17 State House Station, Augusta, Maine 04333.

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NOTE: The Board of Environmental Protection recognizes that many municipalities have developed and adopted comprehensive land use ordinances for all land areas within their respective communities. Those ordinances may or may not follow a similar format to this guideline ordinance. It is not the intent of the Board to impose this guideline ordinance on a municipality which, within its land use codes, has otherwise met the intent and purposes of the Mandatory Shoreland Zoning Act and this guideline ordinance.

Whether or not municipalities choose to integrate their shoreland zoning requirements into a town-wide zoning ordinance, it is important to develop a comprehensive and coordinated strategy for managing and guiding growth in the shoreland area.

## Chapter 1000: GUIDELINES FOR MUNICIPAL SHORELAND ZONING ORDINANCES

Shoreland Zoning Ordinance for the Municipality of

- 1. Purposes. The purposes of this Ordinance are to further the maintenance of safe and healthful conditions; to prevent and control water pollution; to protect fish spawning grounds, aquatic life, bird and other wildlife habitat; to protect buildings and lands from flooding and accelerated erosion; to protect archaeological and historic resources; to protect commercial fishing and maritime industries; to protect freshwater and coastal wetlands; to control building sites, placement of structures and land uses; to conserve shore cover, and visual as well as actual points of access to inland and coastal waters; to conserve natural beauty and open space; and to anticipate and respond to the impacts of development in shoreland areas.
- **2. Authority.** This Ordinance has been prepared in accordance with the provisions of Title 38 <u>Sections</u> 435-449 of the Maine Revised Statutes Annotated (M.R.S.A.).
- 3. Applicability. This Ordinance applies to all land areas within 250 feet, horizontal distance, of the
  - normal high-water line of any great pond or river,
  - upland edge of a coastal wetland, including all areas affected by tidal action, or
  - upland edge of a freshwater wetland,

and all land areas within 75 feet, horizontal distance, of the normal high-water line of a stream.

normal high water line of any great pond, river or saltwater body, within 250 feet, horizontal distance, of the upland edge of a coastal or freshwater wetland, and within 75 feet, horizontal distance, of the normal high water line of a stream.

This Ordinance also applies to any structure built on, over or abutting a dock, wharf or pier, or other structure extending or located beyond-below the normal high-water line of a water body or within a wetland.

NOTE: Municipalities may choose not to regulate structures built on, over or abutting a dock, wharf, pier or other structure extending beyond the normal high-water line of a water body or within a wetland. If so, the sentence "This Ordinance also applies to any structure built on, over or abutting a dock, wharf, pier, or other structure extending or located below the normal high-water line of a water body or within a wetland.", in Section 3 above, must be stricken from the Ordinance. In addition: Item 17 pertaining to "Piers, docks, wharfs, bridges and other structures and uses extending over or below the normal high-water line or within a wetland" in Section 14, Table 1, Land Uses in the Shoreland Zone; Section 15 (C), Standards for Piers, docks, wharfs, bridges and other structures and uses extending over or below the normal high-water line or within a wetland; and the definition of "Piers, docks, wharfs, bridges and other structures and uses extending over or below the normal high-water line or within a wetland" in Section 17 should be deleted.

NOTE: Coastal wetlands, by definition, include all areas affected by tidal action, not just those areas where salt marshes and salt meadows exist. Cobble and sand beaches, mudflats, and rocky ledges, below the maximum spring tide are all considered to be coastal wetlands.

NOTE: Pursuant to <u>Title-38 M.R.S.A.</u>; <u>sSection 440</u>, municipalities may extend or adopt zoning controls beyond the limits established in <u>this-Section 3</u>, <u>above</u>, in order to protect the public health, safety, and welfare and to avoid problems associated with flood-plain development.

# 4. Effective Date

4. A. Effective Date of Ordinance and Ordinance Amendments.and Repeal of Formerly Adopted Ordinance. This Ordinance, which was adopted by the municipal legislative body on \_\_\_\_\_\_\_, shall not be effective unless approved by the Commissioner of the Department of Environmental Protection. A certified copy of the Ordinance, or Ordinance Amendment, attested and signed by the Municipal Clerk, shall be forwarded to the Commissioner for approval. If the Commissioner fails to act on this Ordinance or Ordinance Amendment, within forty-five (45) days of his/her receipt of the Ordinance, or Ordinance Amendment, it shall be automatically approved. Upon approval of this Ordinance, the shoreland zoning ordinance previously adopted on \_\_\_\_\_\_\_ is hereby repealed.

Any application for a permit submitted to the municipality within the forty-five (45) day period shall be governed by the terms of this Ordinance, or Ordinance Amendment, if the Ordinance, or Ordinance Amendment, is approved by the Commissioner.

**B.** Sections 15(O) and 15(O-1). Section 15(O) is repealed on the statutory date established under 38 M.R.S.A. section 438-A(5), at which time Section 15(O-1) shall become effective. Until such time as Section 15(O) is repealed, Section 15(O-1) is not in effect.

NOTE: The statutory date established under 38 M.R.S.A. section 438-A(5) is the effective date of state-wide timber harvesting standards. That date is "the first day of January of the 2<sup>nd</sup> year following the year in which the Commissioner of Conservation determines that at least 252 of the 336 municipalities identified by the Commissioner of Conservation as the municipalities with the highest acreage of timber harvesting activity on an annual basis for the period 1992-2003 have either accepted the state-wide standards or have adopted an ordinance identical to the state-wide standards." 38 M.R.S.A. section 438-A(5) further provides that "the Commissioner of Conservation shall notify the Secretary of State in writing and advise the Secretary of the effective date of the state-wide standards."

- 5. Availability. A certified copy of this Ordinance shall be filed with the Municipal Clerk and shall be accessible to any member of the public. Copies shall be made available to the public at reasonable cost at the expense of the person making the request. Notice of availability of this Ordinance shall be posted.
- **6. Severability.** Should any section or provision of this Ordinance be declared by the courts to be invalid, such decision shall not invalidate any other section or provision of the Ordinance.
- **7. Conflicts with Other Ordinances.** Whenever a provision of this Ordinance conflicts with or is inconsistent with another provision of this Ordinance or of any other ordinance, regulation or statute administered by the municipality, the more restrictive provision shall control.
- **8. Amendments.** This Ordinance may be amended by majority vote of the legislative body. Copies of amendments, attested and signed by the Municipal Clerk, shall be submitted to the Commissioner of the Department of Environmental Protection following adoption by the municipal legislative body and shall not be effective unless approved by the Commissioner. If the Commissioner fails to act on

any amendment within forty-five (45) days of his/her receipt of the amendment, the amendment is automatically approved. Any application for a permit submitted to the municipality within the forty-five (45) day period shall be governed by the terms of the amendment, if such amendment is approved by the Commissioner.

# 9. Districts and Zoning Map

- **A. Official Shoreland Zoning Map.** The areas to which this Ordinance is applicable are hereby divided into the following districts as shown on the Official Shoreland Zoning Map(s) which is (are) made a part of this Ordinance:
  - (1) Resource Protection
  - (2) Limited Residential
  - (3) Limited Commercial
  - (4) General Development I
  - (5) General Development II
  - (<u>56</u>)—Commercial Fisheries/Maritime Activities
  - (67) Stream Protection

NOTE: The development of a waterfront management strategy can be a complex process. There are many different techniques that can be used to tailor an ordinance to reflect local goals and resources. The Commercial Fisheries/Maritime Activities (CFMA) District included in these Guidelines is one approach which is based on allowing as permitted uses only those uses which are functionally water-dependent. But other zoning variations are also possible which may be much more specific about what types of functionally water-dependent uses should be permitted, make use of more than one type of waterfront district, may include standards for assessing the impact of proposed development on water dependent uses, and may include specific provisions to encourage certain types of public benefits.

The Department of Environmental Protection has developed one example of a more elaborate ordinance, which is available as a technical supplement to this model ordinance. There are many other sources of information available to assist with the design of this type of ordinance. The State Planning Office's Community Planning and Investment Program and your regional planning council should be consulted for additional assistance.

**B.** Scale of Map. The Official Shoreland Zoning Map shall be drawn at a scale of not less than: 1 inch = 2000 feet. District boundaries shall be clearly delineated and a legend indicating the symbols for each district shall be placed on the map.

NOTE: Because of map scale or other reason, a municipality may have a series of maps depicting its shoreland zone.

- **C.** Certification of Official Shoreland Zoning Map. The Official Shoreland Zoning Map shall be certified by the attested signature of the Municipal Clerk and shall be located in the municipal office. In the event the municipality does not have a municipal office, the Municipal Clerk shall be the custodian of the map.
- **D.** Changes to the Official Shoreland Zoning Map. If amendments, in accordance with Section 8, are made in the district boundaries or other matter portrayed on the Official Shoreland Zoning Map, such changes shall be made on the Official Shoreland Zoning Map within thirty (30) days

after the amendment has been approved by the Commissioner of the Department of Environmental Protection.

- **10. Interpretation of District Boundaries.** Unless otherwise set forth on the Official Shoreland Zoning Map, district boundary lines are property lines, the centerlines of streets, roads and rights of way, and the boundaries of the shoreland area as defined herein. Where uncertainty exists as to the exact location of district boundary lines, the Board of Appeals shall be the final authority as to location.
- NOTE: Municipalities are encouraged to incorporate specific written descriptions of district boundaries into the Ordinance so that disputes over district boundaries are minimized. The Maine Supreme Judicial Court has held that the Official Shoreland Zoning Map is the primary tool to which to refer in determining district boundaries under ordinances that are not more explicit in their district descriptions than the language of the Guidelines, and that where there is inconsistency between the Map and these general text descriptions of the shoreland districts as provided in the minimum guidelines, the Map prevails.
- 11. Land Use Requirements. Except as hereinafter specified, no building, structure or land shall hereafter be used or occupied, and no building or structure or part thereof shall hereafter be erected, constructed, expanded, moved, or altered and no new lot shall be created except in conformity with all of the regulations herein specified for the district in which it is located, unless a variance is granted.

#### 12. Non-conformance.

A. Purpose. It is the intent of this Ordinance to promote land use conformities, except that non-conforming conditions that existed before the effective date of this Ordinance or amendments thereto shall be allowed to continue, subject to the requirements set forth in this—Section\_12. Except as otherwise provided in this Ordinance, a non-conforming condition shall not be permitted to become more non-conforming.

#### B. General

- (1) Transfer of Ownership. Non-conforming structures, lots, and uses may be transferred, and the new owner may continue the non-conforming use or continue to use the non-conforming structure or lot, subject to the provisions of this Ordinance.
- (2) Repair and Maintenance. This Ordinance allows, without a permit, the normal upkeep and maintenance of non-conforming uses and structures including repairs or renovations that which do not involve expansion of the non-conforming use or structure, and such other changes in a non-conforming use or structure as federal, state, or local building and safety codes may require.

NOTE: See Section 17 for the definitions of non-conforming structures, non-conforming uses and non-conforming lots.

## C. Non-conforming Structures

(1)\_Expansions. A non-conforming structure may be added to or expanded after obtaining a permit from the same permitting authority as that for a new structure, if such addition or

expansion does not increase the non-conformity of the structure and is in accordance with subparagraphs (a) and (b) below.

—[Alternatively, a municipality may, by local ordinance, regulate expansions of non-conforming structures in accordance with Appendix A, *Alternative to 30% Expansion Rule Pursuant to Title-38 M.R.S.A Section 439-A.* In adopting the alternative provisions contained in Appendix A, a municipality may choose not to include the "special expansion allowance" provision contained in paragraphs (1-A), (1-B), and (1-C) of Appendix A.]

NOTE: Municipalities that elect to adopt the alternative expansion limitation for nonconforming structures may not retain the 30% expansion limitation. However, regardless of the expansion limitation chosen, the provisions contained in Section 12(C) paragraphs (2), (3) and (4) below pertaining to Relocation, Reconstruction or Replacement, and Change of Use of a Nonconforming Structure must be retained.

- (a) After January 1, 1989 if any portion of a structure is less than the required setback from the normal high-water line of a water body or tributary stream or the upland edge of a wetland, that portion of the structure shall not be expanded, as measured in floor area or volume, by 30% or more, during the lifetime of the structure. If a replacement structure conforms with the requirements of Section 12(C)(3), and is less than the required setback from a water body, tributary stream or wetland, the replacement structure may not be expanded if the original structure existing on January 1, 1989 had been expanded by 30% in floor area and volume since that date.
- (b) Construction or enlargement of a foundation beneath the existing structure shall not be considered an expansion of the structure provided: Whenever a new, enlarged, or replacement foundation is constructed under a non-conforming structure,
- (i) Tthe structure and new foundation must be are placed such that the setback requirement is met to the greatest practical extent as determined by the pPlanning bBoard or its designee, basing its decision on the criteria specified in subsection Section 12(C)(2) Relocation, below; If
- <u>(ii)</u> Tthe completed foundation does not extend beyond the exterior dimensions of the structure; except for expansion in conformity with Section 12(C)(1)(a) above, and
- (iii) Tthe foundation does not cause the structure to be elevated by more than three (3) additional feet, as measured from the uphill side of the structure (from original ground level to the bottom of the first floor sill), it shall not be considered to be an expansion of the structure.
- (2) Relocation. A non-conforming structure may be relocated within the boundaries of the parcel on which the structure is located provided that the site of relocation conforms to all setback requirements to the greatest practical extent as determined by the pPlanning bBoard or its designee, and provided that the applicant demonstrates that the present subsurface sewage disposal system meets the requirements of State law and the State of Maine Subsurface Wastewater Disposal Rules (Rules), or that a new system can be installed in compliance with the law and said Rules. In no case shall a structure be relocated in a manner that causes the structure to be more non-conforming.

—In determining whether the building relocation meets the setback to the greatest practical extent, the Planning Board<u>or its designee</u> shall consider the size of the lot, the slope of the land, the potential for soil erosion, the location of other structures on the property and on adjacent properties, the location of the septic system and other on-site soils suitable for septic systems, and the type and amount of vegetation to be removed to accomplish the relocation. When it is necessary to remove vegetation within the water or wetland setback area in order to relocate a structure, the Planning Board shall require replanting of native vegetation to compensate for the destroyed vegetation. In addition, the area from which the relocated structure was removed must be replanted with vegetation. Replanting shall be required as follows:

(a) Trees removed in order to relocate a structure must be replanted with at least one native tree, three (3) feet in height, for every tree removed. If more than five trees are planted, no one species of tree shall make up more than 50% of the number of trees planted. Replaced trees must be planted no further from the water or wetland than the trees that were removed.

Other woody and herbaceous vegetation, and ground cover, that are removed or destroyed in order to relocate a structure must be re-established. An area at least the same size as the area where vegetation and/or ground cover was disturbed, damaged, or removed must be reestablished within the setback area. The vegetation and/or ground cover must consist of similar native vegetation and/or ground cover that was disturbed, destroyed or removed.

- (b) Where feasible, when a structure is relocated on a parcel the original location of the structure shall be replanted with vegetation which may consist of grasses, shrubs, trees, or a combination thereof.
- (3) Reconstruction or Replacement. Any non-conforming structure which is located less than the required setback from the normal high water line of a water body, tributary stream, or upland edge of a wetland and which is removed, or damaged or destroyed, regardless of the cause, by more than 50% of the market value of the structure before such damage, destruction or removal, may be reconstructed or replaced provided that a permit is obtained within one veareighteen (18) months of the date of said damage, destruction, or removal, and provided that such reconstruction or replacement is in compliance with the water body, tributary stream or wetland setback requirement to the greatest practical extent as determined by the Planning Board or its designee in accordance with the purposes of this Ordinance. In no case shall a structure be reconstructed or replaced so as to increase its non-conformity. If the reconstructed or replacement structure is less than the required setback it shall not be any larger than the original structure, except as allowed pursuant to Section 12(C)(1) above, as determined by the non-conforming floor area and volume of the reconstructed or replaced structure at its new location. If the total amount of floor area and volume of the original structure can be relocated or reconstructed beyond the required setback area, no portion of the relocated or reconstructed structure shall be replaced or constructed at less than the setback requirement for a new structure. When it is necessary to remove vegetation in order to replace or reconstruct a structure, vegetation shall be replanted in accordance with Section 12(C)(2) above.

Any non-conforming structure which is <u>located less than the required setback from a water</u> body, tributary stream, or wetland and which is removed by 50% or less of the market value,

<u>or</u> damaged or destroyed by 50% or less of the market value of the structure, excluding normal maintenance and repair, may be <u>reconstructed</u> in place <u>if</u> <u>with</u> a permit <u>is obtained</u>, from the Code Enforcement Officer <u>within one year of such damage</u>, <u>destruction</u>, or removal.

In determining whether the building reconstruction or replacement meets the water setback to the greatest practical extent the Planning Board or its designee shall consider, in addition to the criteria in Section 12(C)paragraph (2) above, the physical condition and type of foundation present, if any.

(4) Change of Use of a Non-conforming Structure. The use of a non-conforming structure may not be changed to another use unless the Planning Board, after receiving a written application, determines that the new use will have no greater adverse impact on the water body, tributary stream, or wetland, or on the subject or adjacent properties and resources than the existing use.

—In determining that no greater adverse impact will occur, the Planning Board shall require written documentation from the applicant, regarding the probable effects on public health and safety, erosion and sedimentation, water quality, fish and wildlife habitat, vegetative cover, visual and actual points of public access to waters, natural beauty, flood-plain management, archaeological and historic resources, and commercial fishing and maritime activities, and other functionally water-dependent uses.

### **D.** Non-conforming Uses

- (1) Expansions. Expansions of non-conforming uses are prohibited, except that non-conforming residential uses may, after obtaining a permit from the Planning Board, be expanded within existing residential structures or within expansions of such structures as <a href="mailto:permitted-allowed">permitted-allowed</a> in Section 12(C)(1)(a) above.
- (2) Resumption Prohibited. A lot, building or structure in or on which a non-conforming use is discontinued for a period exceeding one year, or which is superseded by a conforming use, may not again be devoted to a non-conforming use except that the Planning Board may, for good cause shown by the applicant, grant up to a one year extension to that time period. This provision shall not apply to the resumption of a use of a residential structure provided that the structure has been used or maintained for residential purposes during the preceding five (5) year period.
- (3) Change of Use. An existing non-conforming use may be changed to another non-conforming use provided that the proposed use has no greater adverse impact on the subject and adjacent properties and resources, including water dependent uses in the CFMA district, than the former use, as determined by the Planning Board. The determination of no greater adverse impact shall be made according to criteria listed in Section 12-(C)-(4) above.

# E. Non-conforming Lots

(1) Non-conforming Lots: A non-conforming lot of record as of the effective date of this Ordinance or amendment thereto may be built upon, without the need for a variance, provided that such lot is in separate ownership and not contiguous with any other lot in the same ownership, and that all provisions of this Ordinance except lot <u>areasize</u>, lot width and

<u>shore</u> frontage can be met. Variances relating to setback or other requirements not involving lot <u>area</u>, <u>lot widthsize</u> or <u>shore</u> frontage shall be obtained by action of the Board of Appeals.

(2) Contiguous Built Lots: If two or more contiguous lots or parcels are in a single or joint ownership of record at the time of adoption of this Ordinance, if all or part of the lots do not meet the dimensional requirements of this Ordinance, and if a principal use or structure exists on each lot, the non-conforming lots may be conveyed separately or together, provided that the State Minimum Lot Size Law (12 M.R.S.A. sections 4807-A through 4807-D) and the State of Maine Subsurface Wastewater Disposal Rules are complied with.

If two or more principal uses or structures existed on a single lot of record on the effective date of this ordinance, each may be sold on a separate lot provided that the above referenced law and rules are complied with. When such lots are divided each lot thus created must be as conforming as possible to the dimensional requirements of this Ordinance.

(3) (3)—Contiguous Lots - Vacant or Partially Built: If two or more contiguous lots or parcels are in single or joint ownership of record at the time of or since adoption or amendment of this Ordinance, if any of these lots do not individually meet the dimensional requirements of this Ordinance or subsequent amendments, and if one or more of the lots are vacant or contain no principal structure the lots shall be combined to the extent necessary to meet the dimensional requirements.

NOTE: Consistent with 38 M.R.S.A. section 438-A(1-A)(B), the immediately following exception may be adopted at the end of Section 12(E)(3) above if the municipality wishes to grandfather certain contiguous lots that were conforming and under the same ownership at the time lot size and shore frontage requirements were increased beyond those found in subparagraph E(3)(a).

This provision shall not apply to 2 or more contiguous lots, at least one of which is non-conforming, owned by the same person or persons on the effective date of this Ordinance and recorded in the registry of deeds if the lot is served by a public sewer or can accommodate a subsurface sewage disposal system in conformance with the State of Maine Subsurface Wastewater Disposal Rules; and

- (a) Each lot contains at least 100 feet of shore frontage and at least 20,000 square feet of lot area; or
- (b) Any lots that do not meet the frontage and lot size requirements of Section 12(E)(3)(a) subparagraph a. are reconfigured or combined so that each new lot contains at least 100 feet of shore frontage and 20,000 square feet of lot area.

#### 13. Establishment of Districts

A. Resource Protection District. The Resource Protection District includes areas in which development would adversely affect water quality, productive habitat, biological ecosystems, or scenic and natural values. This district shall include the following areas when they occur within the limits of the shoreland zone, exclusive of the Stream Protection District, except that areas which are currently developed and areas which meet the criteria for the Limited Commercial,

General Development\_I, or Commercial Fisheries/Maritime Activities Districts need not be included within the Resource Protection District.

(1) Areas within 250 feet, horizontal distance, of the upland edge of freshwater wetlands, salt marshes and salt meadows, and wetlands associated with great ponds and rivers, which are rated "moderate" or "high" value waterfowl and wading bird habitat, including nesting and feeding areas, by the Maine Department of Inland Fisheries and Wildlife (MDIF&W) that are depicted on a Geographic Information System (GIS) data layer maintained by either MDIF&W or the Department as of May 1, 2006.as of January 1, 1973. For the purposes of this paragraph "wetlands associated with great ponds and rivers" shall mean areas characterized by non-forested wetland vegetation and hydric soils that are contiguous with a great pond or river, and have a surface elevation at or below the water level of the great pond or river during the period of normal high water. "Wetlands associated with great ponds or rivers" are considered to be part of that great pond or river.

NOTE: The Natural Resources Protection Act, <u>Title-38 M.S.R.A. sSections 480-A through 480-SZ</u>, requires the Department of Environmental Protection to designate areas of "significant wildlife habitat". Significant wildlife habitat includes:

Habitat for species appearing on the official state or federal lists of endangered or threatened species; high and moderate value deer wintering areas and travel corridors as defined by the Department of Inland Fisheries and Wildlife; high and moderate value waterfowl and wading bird habitats, including nesting and feeding areas as defined by the Department of Inland Fisheries and Wildlife; critical spawning and nursery areas for Atlantic sea run salmon as defined by the Atlantic Sea Run Salmon Commission; and shorebird nesting, feeding and staging areas and seabird nesting islands as defined by the Department of Inland Fisheries and Wildlife.

As these areas are mapped and development standards are established, municipalities should incorporate such areas and standards into their locally adopted ordinances.

- (2) Flood-plains along rivers and flood-plains along artificially formed great ponds along rivers, defined by the 100 year flood-plain as designated on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or Flood Hazard Boundary Maps, or the flood of record, or in the absence of these, by soil types identified as recent flood-plain soils. This district shall also include 100 year flood-plains adjacent to tidal waters as shown on FEMA's Flood Insurance Rate Maps or Flood Hazard Boundary Maps.
- (3) Areas of two or more contiguous acres with sustained slopes of 20% or greater.
- (4) Areas of two (2) or more contiguous acres supporting wetland vegetation and hydric soils, which are not part of a freshwater or coastal wetland as defined, and which are not surficially connected to a water body during the period of normal spring-high water.

NOTE: These areas usually consist of forested wetlands abutting water bodies and non-forested wetlands.

(5) Land areas along rivers subject to severe bank erosion, undercutting, or river bed movement, and lands adjacent to tidal waters which are subject to severe erosion or mass movement, such as steep coastal bluffs.

NOTE: Municipalities may also include the following other areas which have been recommended for protection in the comprehensive plan of the municipality, such as:

- A. Other important wildlife habitat;
- B. Natural sites of significant scenic or esthetic value;
- C. Areas designated by federal, state or municipal governments as natural areas of significance to be protected from development; and
- D. Other significant areas which should be included in this district to fulfill the purposes of this Ordinance, such as, but not limited to, existing public access areas and certain significant archaeological and historic sites deserving of long-term protection as determined by the municipality after consultation with the Maine Historic Preservation Commission.
- **B.** Limited Residential District. The Limited Residential District includes those areas suitable for residential and recreational development. It includes areas other than those in the Resource Protection District, or Stream Protection District, and areas which are used less intensively than those in the Limited Commercial District, the General Development Districts, or the Commercial Fisheries/Maritime Activities District.
- **C.** Limited Commercial District. The Limited Commercial District includes areas of mixed, light commercial and residential uses, exclusive of the Stream Protection District, which should not be developed as intensively as the General Development Districts. This district includes areas of two or more contiguous acres in size devoted to a mix of residential and low intensity business and commercial uses. Industrial uses are prohibited.
- **D.** General Development I District. The General Development I District includes the following types of existing, intensively developed areas:
  - (1) Areas of two or more contiguous acres devoted to commercial, industrial or intensive recreational activities, or a mix of such activities, including but not limited to the following:
    - (a) Areas devoted to manufacturing, fabricating or other industrial activities;
    - (b) Areas devoted to wholesaling, warehousing, retail trade and service activities, or other commercial activities; and
    - (c) Areas devoted to intensive recreational development and activities, such as, but not limited to amusement parks, race tracks and fairgrounds.
  - (2) Areas otherwise discernible as having patterns of intensive commercial, industrial or recreational uses.
- E. General Development II District. The General Development II District includes the same types of areas as those listed for the General Development I District. The General Development II District, however, shall be applied to newly established General Development Districts where the

pattern of development at the time of adoption is undeveloped or not as intensively developed as that of the General Development I District.

- —Portions of the General Development District <u>I or II</u> may also include residential development. However, no area shall be designated as a General Development <u>I or II</u> District based solely on residential use.
- —In areas adjacent to great ponds classified GPA and adjacent to rivers flowing to great ponds classified GPA, the designation of an area as a General Development District shall be based upon uses existing at the time of adoption of this Ordinance. There shall be no newly established General Development Districts or expansions in area of existing General Development Districts adjacent to great ponds classified GPA, and adjacent to rivers that which flow to great ponds classified GPA.
- NOTE: See definition of "great pond classified GPA" in Section 17. In most municipalities all of the great ponds are classified GPA. In municipalities where all of the great ponds are classified GPA, the term "great ponds classified GPA" can be changed to "great ponds". It may also be helpful to list the names of the great ponds found in the municipality within the definition of "great pond' in Section 17.
- **Ef.** Commercial Fisheries/Maritime Activities District. The Commercial Fisheries/Maritime Activities District includes areas where the existing predominant pattern of development is consistent with the allowed uses for this district as indicated in the Table of Land Uses, Section 14, and other areas which are suitable for functionally water-dependent uses, taking into consideration such factors as:
  - (1) Shelter from prevailing winds and waves;
  - (2) Slope of the land within 250 feet, horizontal distance, of the normal high water lineshoreline;
  - (3) Depth of the water within 150 feet, horizontal distance, of the shoreline;
  - (4) Available support facilities including utilities and transportation facilities; and
  - (5) Compatibility with adjacent upland uses.
- NOTE: A municipality may opt to identify one or more CFMA Districts, each of which may be as small as a single parcel, provided that the municipality includes in this district or combination of CFMA districts, all land currently occupied by or suitable for active water dependent uses, taking into consideration the above-listed factors.
- **FG. Stream Protection District.** The Stream Protection District includes all land areas within seventy-five (75) feet, horizontal distance, of the normal high-water line of a stream, exclusive of those areas within two-hundred and fifty (250) feet, horizontal distance, of the normal high-water line of a great pond, or river or saltwater body, or within two hundred and fifty (250) feet, horizontal distance, of the upland edge of a freshwater or coastal wetland. Where a stream and its associated shoreland area are located within two-hundred and fifty (250) feet, horizontal distance, of the above water bodies or wetlands, that land area shall be regulated under the terms of the shoreland district associated with that water body or wetland.

**14. Table of Land Uses.** All land use activities, as indicated in Table 1, Land Uses in the Shoreland Zone, shall conform with all of the applicable land use standards in Section 15. The district designation for a particular site shall be determined from the Official Shoreland Zoning Map.

## Key to Table 1:

- Yes Allowed (no permit required but the use must comply with all applicable land use standards.)
- No Prohibited
- PB Requires Allowed with permit issued by the Planning Board.
- CEO Requires Allowed with permit issued by the Code Enforcement Officer
- LPI Requires Allowed with permit issued by the Local Plumbing Inspector

#### Abbreviations:

RP - Resource Protection ——GD — General Development I and General Development II

LR - Limited Residential ——CFMA - Commercial Fisheries/Maritime Activities

LC - Limited Commercial ——SP - Stream Protection

The following notes are applicable to the Land Uses Table on the following page:

NOTE: The term "functionally water-dependent use" as defined, includes a very diverse group of uses ranging from large, industrial facilities that receive shipments by water or use water for cooling, to traditional commercial fishing enterprises, and public shorefront parks. Communities are encouraged to define the functionally water-dependent uses which are to be <a href="mailto:permitted-allowed">permitted-allowed</a> and which are prohibited in each CFMA district, based on considerations of prevailing existing uses, desired future uses, available support facilities, site suitability and compatibility with adjacent uses. A municipality can narrow the range of <a href="mailto:permitted-allowed">permitted-allowed</a> uses by precluding certain functionally water-dependent uses, or by adopting conditional uses for certain functionally water-dependent uses that it determines would only be compatible with its plan for the waterfront under certain conditions.

NOTE: Recreational water-dependent uses such as marinas and excursion vessels may, in some communities, displace or threaten to displace traditional commercial fisheries and maritime activities. Therefore communities may wish to preclude or further limit these types of uses in this district in order to protect berthing space and onshore staging areas for commercial fishing enterprises.

TABLE 1. LAND USES IN THE SHORELAND ZONE

| LAND USES  |                       | DISTRICT           |                    |                   |                   |                          |
|--|-----------------------|--------------------|--------------------|-------------------|-------------------|--------------------------|
|  | <u>SP</u>             | <u>RP</u>          | <u>LR</u>          | LC                | GD                | <b>CFMA</b>              |
| Non-intensive recreational uses not requiring structures such as                                 |                       |                    | · <del></del>      |                   |                   | ·                        |
| hunting, fishing and hiking  | yes                   | yes                | yes                | yes               | yes               | yes                      |
| 2. Motorized vehicular traffic on existing roads and trails                                      | yes                   | yes                | yes                | yes               | yes               | yes                      |
| Forest management activities except for timber harvesting <u>&amp; land</u> management roads     | yes                   | yes                | yes                | yes               | yes               | yes                      |
| 4. Timber harvesting   | yes                   | CEO                | yes                | yes               | yes               | yes                      |
| 5.Clearing or removal of vegetation for activities other than timber                             | CEO                   | CEO <sup>1</sup>   | yes                | yes               | yes               | yes                      |
| harvestingapproved construction and other allowed uses   |                       |                    |                    |                   |                   |                          |
| 6. Fire prevention activities  | yes                   | yes                | yes                | yes               | yes               | yes                      |
| 7. Wildlife management practices   | yes                   | yes                | yes                | yes               | yes               | yes                      |
| 8. Soil and Wwater conservation practices  | yes                   | yes                | yes                | yes               | yes               | yes                      |
| 9. Mineral exploration   | no                    | yes <sup>2</sup>   | yes <sup>2</sup> 2 | yes <sup>2</sup>  | yes <sup>2</sup>  | yes <sup>2</sup>         |
| 10. Mineral extraction including sand and gravel extraction                                      | no                    | PB <sup>3</sup>    | PB                 | PB                | PB                | PB                       |
| 11. Surveying and resource analysis  | yes                   | yes                | yes                | yes               | yes               | yes                      |
| 12. Emergency Ooperations  | yes                   | yes                | yes                | yes               | yes               | yes                      |
| 13. Agriculture  | yes                   | PB                 | yes                | yes               | yes               | yes                      |
| 14. Aquaculture  | PB                    | PB                 | PB                 | yes               | yes               | yes                      |
| 15. Principal structures and uses  | PB <sup>4</sup>       | PB <sup>9</sup>    | 050                | 050               | 050               |                          |
| A. One and two family residential, including driveways   |                       |                    | CEO<br>PB          | CEO<br>PB         | CEO<br>PB         | no                       |
| B. Multi-unit residential  | no                    | no                 | Neno <sup>10</sup> |                   |                   | no<br>PB <sup>5</sup>    |
| C. Commercial D. Industrial  | no                    | Nono <sup>10</sup> |                    | PB                | PB<br>PB          | PB <sup>5</sup>          |
|  | no                    | no                 | no                 | no<br>PB          | PB<br>PB          | PB <sup>5</sup>          |
| E. Governmental and linstitutional   | no<br>PB <sup>4</sup> | no<br>PB           | noPB<br>CEO        | CEO               | CEO               | PB <sup>5</sup>          |
| FSmall non-residential facilities for educational, scientific, or nature interpretation purposes | PB.                   | РВ                 | CEO                | CEO               | CEO               | PB <sup>2</sup>          |
| 16. Structures accessory to allowed uses   | PB <sup>4</sup>       | РВ                 | CEO                | CEO               | yes               | yes                      |
| 17. Piers, docks, wharfs, bridges and other structures and uses extending                        |                       |                    | CLU                | OLO               | yes               | yes                      |
| over or below the normal high-water line or within a wetland                                     |                       |                    |                    |                   |                   |                          |
| a. Temporary   | CEO <sup>11</sup>     | CEO <sup>11</sup>  | CEO <sup>11</sup>  | CEO <sup>11</sup> | CEO <sup>11</sup> | СЕО <u><sup>11</sup></u> |
| b. Permanent   | PB                    | РВ                 | РВ                 | РВ                | PB                | PB <sup>5</sup>          |
| 18. Conversions of seasonal residences to year-round residences                                  | LPI                   | LPI                | LPI                | LPI               | LPI               | no                       |
| 19. Home occupations   | PB                    | noPB               | PB                 | CEO               | yes               | yes                      |
| 20. Private sewage disposal systems for allowed uses   | LPI                   | LPI                | LPI                | LPI               | LPI               | LPI                      |
| 21. Essential services   | PB <sup>6</sup>       | PB <sup>6</sup>    | PB                 | PB                | PB                | PB                       |
| A. Roadside distribution lines (34.5kV and lower)  | CEO <sup>6</sup>      | CEO <sup>6</sup>   | yes <sup>12</sup>  | yes <sup>12</sup> | yes 12            | yes 12                   |
| B. Non-roadside or cross-country distribution lines involving ten poles or less in               | PB <sup>6</sup>       | PB <sup>6</sup>    | CEO                | CEO               | CEO               | CEO                      |
| the shoreland zone   | 10                    | <u> </u>           |                    |                   |                   |                          |
| C. Non-roadside or cross-country distribution lines involving eleven or more                     | PB <sup>6</sup>       | PB <sup>6</sup>    | PB                 | <u>PB</u>         | PB                | <u>PB</u>                |
| poles in the shoreland zone  |                       |                    |                    |                   |                   |                          |
| D. Other essential services  | PB <sup>6</sup>       | PB <sup>6</sup>    | <u>PB</u>          | <u>PB</u>         | <u>PB</u>         | <u>PB</u>                |
| 22. Service drops, as defined, to allowed uses   | yes                   | yes                | yes                | yes               | yes               | yes _                    |
| 23. Public and private recreational areas involving minimal structural development               | PB                    | PB                 | PB                 | CEO               | CEO               | CEO <sup>5</sup>         |
| 24. Individual, private campsites  | CEO                   | CEO                | CEO                | CEO               | CEO               | CEO                      |
| 25. Campgrounds  | no                    | no '               | PB                 | PB                | PB                | no _                     |
| 26. Road & driveway construction   | PB                    | no <sup>8</sup>    | PB                 | PB                | PB                | PB <sup>5</sup>          |
| 27. Land management roads  | yes                   | PB                 | yes                | <u>yes</u>        | yes               | <u>yes</u>               |
| 2728. Parking facilities   | no                    | no <sup>7</sup>    | PB                 | PB                | РВ                | PB <sup>5</sup>          |
| 2829. Marinas  | PB                    | no                 | PB                 | PB                | РВ                | РВ                       |
| 2930. Filling and earth moving of <10 cubic yards  | CEO                   | CEO                | yes                | yes               | yes               | ves                      |
| 3031. Filling and earth moving of <10 cubic yards  | PB                    | PB                 | CEO                | CEO               | CEO               | CEO                      |
| 3132. Signs  | ves                   | yes                | yes                | ves               | yes               | ves                      |
| 3233. Uses similar to allowed uses   | CEO                   | CEO                | CEO                | CEO               | CEO               | CEO                      |
| 3334. Uses similar to uses requiring a CEO permit  | CEO                   | CEO                | CEO                | CEO               | CEO               | CEO                      |
| 3435. Uses similar to uses requiring a PB permit   | PB                    | PB                 | PB                 | PB                | PB                | PB                       |
|  |                       |                    |                    |                   |                   |                          |

<sup>&</sup>lt;sup>1</sup>In RP not permitted allowed within 75 feet horizontal distance, of the normal high-water line of great ponds, except to remove safety hazards.

Requires permit from the Code Enforcement Officer if more than 100 square feet of surface area, in total, is disturbed.

In RP not permitted allowed in areas so designated because of wildlife value.

Provided that a variance from the setback requirement is obtained from the Board of Appeals.

Functionally water-dependent uses and uses accessory to such water dependent uses only (See note on previous page).

See further restrictions in Section 15( L)(2) on page 20.

Except when area is zoned for resource protection due to flood-plain criteria in which case a permit is required from the PB.

Except as provided in Section 15(H)(4)to provide access to permitted uses within the district, or where no reasonable alternative route or location is available outside the RP area, in which case a permit is required from the PB.

NOTE: Item 17, in its entirety, should be deleted from Table 1 if a municipality elects not to regulate "piers, docks, wharfs, bridges and other structures and uses extending over or below the normal high-water line or within a wetland".

NOTE: A person performing any of the following activities shall require a permit from the Department of Environmental Protection, pursuant to Title-38 M.R.S.A., Section section 480-C, if the activity occurs in, on, over or adjacent to any freshwater or coastal wetland, great pond, river, stream or brook and operates in such a manner that material or soil may be washed into them:

- Dredging, bulldozing, removing or displacing soil, sand, vegetation or other materials;
- Draining or otherwise dewatering;
- Filling, including adding sand or other material to a sand dune; or
- Any construction or alteration of any permanent structure.
- 15. Land Use Standards. All land use activities within the shoreland zone shall conform with the following provisions, if applicable.

NOTE: Municipalities should review the land use standards contained herein to determine whether they will result in a scale of development that is compatible with existing development or with the future desired scale of development. If not, more restrictive land use standards may be adopted by the municipality.

| A. Minimum Lot Star         | dards  | Minimum Lot<br>Area (sq. ft.) | Minimum<br>Shore<br>Frontage (ft.) |  |
|-----------------------------|--|-------------------------------|------------------------------------|--|
| (a) Residential             | per dwelling unit  |                               |                                    |  |
| (i) Within Adjacent to      | the Shoreland Zone<br>Tidal Areas  | 30,000                        | 150                                |  |
| ` ,                         | the Shoreland Zone<br>Non-Tidal Areas  | 40,000                        | 200                                |  |
| (b) Governmen               | (b) Governmental, Institutional, Commercial or Industrial per principal structure                    |                               |                                    |  |
| Adjacer<br>of Thos<br>Comme | the Shoreland Zone at to Tidal Areas, Exclusive a Areas Zoned for arcial Fisheries and be Activities | 40,000                        | 200                                |  |
| Adjacer for Com             | the Shoreland Zone at to Tidal Areas Zoned amercial Fisheries and the Activities                     | NONE                          | NONE                               |  |
| Adjacer                     | the Shoreland Zone<br>at to Non-tidal Areas  | 60,000                        | 300                                |  |

<sup>&</sup>lt;sup>9</sup>Single family residential structures may be allowed by special exception only according to the provisions of Section 16(E), Special Exceptions. Two-family residential structures are prohibited.

Except for commercial uses otherwise listed in this Table, such as marinas and campgrounds, that are allowed in the respective district.

Excluding bridges and other crossings not involving earthwork, in which case no permit is required.

<sup>12</sup>Permit not required but must file a written "notice of intent to construct" with CEO.

- (c) Public and Private Recreational Facilities
  - (i) Within the Shoreland Zone Adjacent to Tidal and Non-Tidal Areas

40,000

200

NOTE: In a district equivalent to a General Development District that is served by municipal water and sewer systems the Department may approve a municipal shoreland zoning ordinance that provides for greater residential densities than set forth in Section 15(A)(1) above.

- (2) Land below the normal high-water line of a water body or upland edge of a wetland and land beneath roads serving more than two (2) lots shall not be included toward calculating minimum lot area.
- (3) Lots located on opposite sides of a public or private road shall be considered each a separate tract or parcel of land unless such road was established by the owner of land on both sides thereof after September 22, 1971.
- (4) The minimum width of any portion of any lot within one hundred (100) feet, horizontal distance, of the normal high-water line of a water body or upland edge of a wetland shall be equal to or greater than the shore frontage requirement for a lot with the proposed use.
- (5) If more than one residential dwelling unit, or more than one principal governmental, institutional, commercial or industrial structure or use, or combination thereof, is constructed or established on a single parcel, all dimensional requirements shall be met for each additional dwelling unit, or principal structure, or use.

NOTE: Municipalities may include provisions for clustered housing within the shoreland zone provided that the overall dimensional requirements, including frontage and lot area per dwelling unit, are met. When determining whether dimensional requirements are met, only land area within the shoreland zone shall be considered.

#### **B.** Principal and Accessory Structures

(1) All new principal and accessory structures shall be set back at least one hundred (100) feet, horizontal distance, from the normal high-water line of great ponds classified GPA and rivers that flow to great ponds classified GPA, and seventy-five (75) feet, horizontal distance, from the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland, except that in the General Development I District the setback from the normal high-water line shall be at least twenty five (25) feet, horizontal distance, and in the Commercial Fisheries/Maritime Activities District there shall be no minimum setback. In the Resource Protection District the setback requirement shall be 250 feet, horizontal distance, except for structures, roads, parking spaces or other regulated objects specifically allowed in that district in which case the setback requirements specified above shall apply.

In addition:

- (a) The water body, tributary stream, or wetland setback provision shall neither apply to structures which require direct access to the water <u>body or wetland</u> as an operational necessity, such as piers, docks and retaining walls, nor to other functionally water-dependent uses.
  - (b) (b)—All principal structures along Significant River Segments as listed in Title—38 M.R.S.A., Section 437 (see Appendix B), shall be set back a minimum of one hundred and twenty-five (125) feet, horizontal distance, from the normal high-water line and shall be screened from the river by existing vegetation. This provision does not apply to structures related to hydropower facilities.
- (c) For principal structures, water and wetland setback measurements shall be taken from the top of a coastal bluff that has been identified on Coastal Bluff maps as being "highly unstable" or "unstable" by the Maine Geological Survey pursuant to its "Classification of Coastal Bluffs" and published on the most recent Coastal Bluff map. If the applicant and the permitting official(s) are in disagreement as to the specific location of a "highly unstable" or "unstable" bluff, or where the top of the bluff is located, the applicant may at his or her expense, employ a Maine Registered Professional Engineer, a Maine Certified Soil Scientist, a Maine State Geologist, or other qualified individual to make a determination. If agreement is still not reached, the applicant may appeal the matter to the board of appeals.
- NOTE: A municipality may choose not to adopt subparagraph B(1)(d) below. However, if a municipality elects to adopt a provision similar to that subparagraph, it must be no less restrictive.
- (d) On a non-conforming lot of record on which only a residential structure exists, and it is not possible to place an accessory structure meeting the required water body, tributary stream or wetland setbacks, the code enforcement officer may issue a permit to place a single accessory structure, with no utilities, for the storage of yard tools and similar equipment. Such accessory structure shall not exceed eighty (80) square feet in area nor eight (8) feet in height, and shall be located as far from the shoreline or tributary stream as practical and shall meet all other applicable standards, including lot coverage and vegetation clearing limitations. In no case shall the structure be located closer to the shoreline or tributary stream than the principal structure.

NOTE: All tidal land which is subject to tidal action during the maximum spring tide is coastal wetland.

NOTE: A municipality may within its ordinance, authorize the Planning Board to increase the required setback of a proposed structure, as a condition to permit approval, if necessary to accomplish the purposes of this ordinance. Instances where a greater setback may be appropriate include, but <u>are not be-limited</u> to: areas of steep slope; shallow or erodible soils; or where an adequate vegetative buffer does not exist.

NOTE: A tributary stream may be perennial or intermittent. Where a tributary stream is present within the shoreland zone, setback standards from that tributary stream are applicable.

- (2) Principal or accessory structures and expansions of existing structures which are permitted in the Resource Protection, Limited Residential, Limited Commercial, and Stream Protection Districts, shall not exceed thirty-five (35) feet in height. This provision shall not apply to structures such as transmission towers, windmills, antennas, and similar structures having no floor area.
- (3)a) The first lowest floor elevation or openings of all buildings and structures, including basements, shall be elevated at least one foot above the elevation of the 100 year flood, the flood of record, or in the absence of these, the flood as defined by soil types identified as recent flood—plain soils. In those municipalities that participate in the National Flood Insurance Program and have adopted the April 2005 version, or later version, of the Floodplain Management Ordinance, accessory structures may be placed in accordance with the standards of that ordinance and need not meet the elevation requirements of this paragraph.
- (4) (4)—The total <u>footprint</u> area of all structures, parking lots and other non-vegetated surfaces, within the shoreland zone shall not exceed twenty (20) percent of the lot or a portion thereof, located within the shoreland zone, including land area previously developed, except in the General Development District adjacent to tidal waters and rivers <u>thatwhich</u> do not flow to great ponds classified GPA, and in the Commercial Fisheries/Maritime Activities District, where lot coverage shall not exceed seventy (70) percent.
- NOTE: A municipality may choose not to adopt subparagraph B(5) below. However, if a municipality elects to adopt a provision similar to that subparagraph, it must be no less restrictive.
  - (5) Retaining walls that are not necessary for erosion control shall meet the structure setback requirement, except for low retaining walls and associated fill provided all of the following conditions are met:
  - (a) The site has been previously altered and an effective vegetated buffer does not exist;
  - (b) The wall(s) is(are) at least 25 feet, horizontal distance, from the normal high-water line of a water body, tributary stream, or upland edge of a wetland;
  - (c) The site where the retaining wall will be constructed is legally existing lawn or is a site eroding from lack of naturally occurring vegetation, and which cannot be stabilized with vegetative plantings;
  - (d) The total height of the wall(s), in the aggregate, are no more than 24 inches;
  - (e) Retaining walls are located outside of the 100-year floodplain on rivers, streams, coastal wetlands, and tributary streams, as designated on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or Flood Hazard Boundary Maps, or the flood of record, or in the absence of these, by soil types identified as recent flood plain soils.
  - (f) The area behind the wall is revegetated with grass, shrubs, trees, or a combination thereof, and no further structural development will occur within the setback area, including patios and decks; and

- (g) A vegetated buffer area is established within 25 feet, horizontal distance, of the normal high-water line of a water body, tributary stream, or upland edge of a wetland when a natural buffer area does not exist. The buffer area must meet the following characteristics:
  - (i) The buffer must include shrubs and other woody and herbaceous vegetation. Where natural ground cover is lacking the area must be supplemented with leaf or bark mulch;
  - (ii) Vegetation plantings must be in quantities sufficient to retard erosion and provide for effective infiltration of stormwater runoff;
  - (iii) Only native species may be used to establish the buffer area;
  - (iv) A minimum buffer width of 15 feet, horizontal distance, is required, measured perpendicularly to the normal high-water line or upland edge of a wetland;
  - (v) A footpath not to exceed the standards in Section 15(P)(2)(a), may traverse the buffer;
- NOTE: If the wall and associated soil disturbance occurs within 75 feet, horizontal distance, of a water body, tributary stream or coastal wetland, a permit pursuant to the Natural Resource Protection Act is required from the Department of Environmental Protection.
- (56) Notwithstanding the requirements stated above, stairways or similar structures may be allowed with a permit from the Code Enforcement Officer, to provide shoreline access in areas of steep slopes or unstable soils provided: that the structure is limited to a maximum of four (4) feet in width; that the structure does not extend below or over the normal high-water line of a water body or upland edge of a wetland, (unless permitted by the Department of Environmental Protection pursuant to the Natural Resources Protection Act, Title-38 M.R.S.A., Section 480-C); and that the applicant demonstrates that no reasonable access alternative exists on the property.
- NOTE: If a municipality elects not to regulate structures and uses extending over or below a water body or wetland, Section 15(C) should not be incorporated into the Ordinance.
- C. Piers, Docks, Wharves, Bridges and Other Structures and Uses Extending Over or Beyond Below the Normal High-Water Line of a Water Body or Within a Wetland.
  - (1) Access from shore shall be developed on soils appropriate for such use and constructed so as to control erosion.
  - (2) The location shall not interfere with existing developed or natural beach areas.
  - (3) The facility shall be located so as to minimize adverse effects on fisheries.
  - (4) The facility shall be no larger in dimension than necessary to carry on the activity and be consistent with the surrounding character and existing conditions, uses, and character of the

- area. A temporary pier, dock or wharf in non-tidal waters shall not be wider than six feet for non-commercial uses.
- (5) No new structure shall be built on, over or abutting a pier, wharf, dock or other structure extending beyond the normal high-water line of a water body or within a wetland unless the structure requires direct access to the water body or wetland as an operational necessity.
- (6) New permanent piers and docks on non-tidal waters shall not be permitted unless it is clearly demonstrated to the Planning Board that a temporary pier or dock is not feasible, and a permit has been obtained from the Department of Environmental Protection, pursuant to the Natural Resources Protection Act.
- (76) No existing structures built on, over or abutting a pier, dock, wharf or other structure extending beyond the normal high-water line of a water body or within a wetland shall be converted to residential dwelling units in any district.
- (87) Except in the General Development Districts and Commercial Fisheries/Maritime Activities District, structures built on, over or abutting a pier, wharf, dock or other structure extending beyond the normal high-water line of a water body or within a wetland shall not exceed twenty (20) feet in height aybove the pier, wharf, dock or other structure.

NOTE: New Ppermanent structures, and expansions thereof, projecting into or over water bodies shall require a permit from the Department of Environmental Protection pursuant to the Natural Resources Protection Act, Title-38 M.R.S.A., Section 480-C. Permits may also be required from the Army Corps of Engineers if located in navigable waters.

- **D.** Campgrounds. Campgrounds shall conform to the minimum requirements imposed under State licensing procedures and the following:
  - (1) Campgrounds shall contain a minimum of five thousand (5,000) square feet of land, not including roads and driveways, for each site. Land supporting wetland vegetation, and land below the normal high-water line of a water body shall not be included in calculating land area per site.
  - (2) The areas intended for placement of a recreational vehicle, tent or shelter, and utility and service buildings shall be set back a minimum of one hundred (100) feet, horizontal distance, from the normal high-water line of a great pond classified GPA or a river flowing to a great pond classified GPA, and seventy-five (75) feet, horizontal distance, from the normal highwater line of other water bodies, tributary streams, or the upland edge of a wetland.
- **E.** Individual-Private Campsites. Individual-private campsites not associated with campgrounds are permitted-allowed provided the following conditions are met:
  - (1) One campsite per lot existing on the effective date of this Ordinance, or thirty thousand (30,000) square feet of lot area within the shoreland zone, whichever is less, may be permitted.
  - (2) Campsite placement on any lot, including the area intended for a recreational vehicle or tent platform, shall be set back one hundred (100) feet, horizontal distance, from the normal high-

- water line of a great pond classified GPA or river flowing to a great pond classified GPA, and seventy-five (75) feet, horizontal distance, from the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland.
- (3) Only one recreational vehicle shall be allowed on a campsite. The recreational vehicles shall not be located on any type of permanent foundation except for a gravel pad, and no structure(s) except a canopyies shall be attached to the recreational vehicle.
- (4) The clearing of vegetation for the siting of the recreational vehicle, tent or similar shelter in a Resource Protection District shall be limited to one thousand (1000) square feet.
- (5) A written sewage disposal plan describing the proposed method and location of sewage disposal shall be required for each campsite and shall be approved by the Local Plumbing Inspector. Where disposal is off-site, written authorization from the receiving facility or land owner is required.
- (6) When a recreational vehicle, tent or similar shelter is placed on-site for more than one hundred and twenty (120) days per year, all requirements for residential structures shall be met, including the installation of a subsurface sewage disposal system in compliance with the State of Maine Subsurface Wastewater Disposal Rules unless served by public sewage facilities.
- **F.** Commercial and Industrial Uses. The following new commercial and industrial uses are prohibited within the shoreland zone adjacent to great ponds classified GPA, and rivers and streams which flow to great ponds classified GPA:
  - (1) Auto washing facilities
  - (2) Auto or other vehicle service and/or repair operations, including body shops
  - (3) Chemical and bacteriological laboratories
  - (4) Storage of chemicals, including herbicides, pesticides or fertilizers, other than amounts normally associated with individual households or farms
  - NOTE: 22 M.R.S.A. section 1471-U requires municipal ordinances that apply to pesticide storage, distribution or use be filed with the Maine Board of Pesticides Control, 28 State House Station, Augusta, ME 04333. If a municipality's ordinance is more inclusive or restrictive than these Guidelines, as it pertains to pesticides, a copy of the ordinance must be filed with the Board of Pesticides Control.
  - (5) Commercial painting, wood preserving, and furniture stripping
  - (6) Dry cleaning establishments
  - (7) Electronic circuit assembly
  - (8) Laundromats, unless connected to a sanitary sewer

- (9) Metal plating, finishing, or polishing
- (10) Petroleum or petroleum product storage and/or sale except storage on same property as use occurs and except for storage and sales associated with marinas
- (11) Photographic processing
- (12) Printing

# G. Parking Areas

- (1) Parking areas shall meet the shoreline <u>and tributary stream</u> setback requirements for structures for the district in which such areas are located, except that in the Commercial Fisheries/Maritime Activities District parking areas shall be set back at least twenty-five (25) feet, <u>horizontal distance</u>, from the <u>shorelinenormal high water line or the upland edge of a wetland</u>. The setback requirement for parking areas serving public boat launching facilities, in Districts other than <u>the General Development I District</u> and Commercial Fisheries/Maritime Activities Districts <u>may shall</u> be <u>reduced to no less than fifty (50) feet</u>, <u>horizontal distance</u>, from the <u>shoreline or tributary stream normal high water line or upland edge of a wetland</u> if the Planning Board finds that no other reasonable alternative exists further from the shoreline or tributary stream.
- (2) Parking areas shall be adequately sized for the proposed use and shall be designed to prevent stormwater runoff from flowing directly into a water body, <u>tributary stream or wetland</u> and where feasible, to retain all runoff on-site.
- (3) In determining the appropriate size of proposed parking facilities, the following shall apply:
  - (a) Typical parking space: Approximately ten (10) feet wide and twenty (20) feet long, except that parking spaces for a vehicle and boat trailer shall be forty (40) feet long.
  - (b) Internal travel aisles: Approximately twenty (20) feet wide.
- **H. Roads and Driveways.** The following standards shall apply to the construction of roads and/or driveways and drainage systems, culverts and other related features.
  - (1) Roads and driveways shall be set back at least one-hundred (100) feet, horizontal distance, from the normal high-water line of a great pond classified GPA or a river that flows to a great pond classified GPA, and seventy-five (75) feet, horizontal distance from the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland unless no reasonable alternative exists as determined by the Planning Board. If no other reasonable alternative exists, the Planning Board may reduce the road and/or driveway setback requirement shall be to no less than fifty (50) feet, horizontal distance, upon clear showing by the applicant that appropriate techniques will be used to prevent sedimentation of the water body, tributary stream, or wetland. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed so as to avoid sedimentation of the water body, tributary stream, or wetland.

On slopes of greater than twenty (20) percent the road and/or driveway setback shall be increased by ten (10) feet, horizontal distance, for each five (5) percent increase in slope above twenty (20) percent.

This Section 15 (H)(1)paragraph shall neitherdoes not apply to approaches to water crossings nor to roads or driveways that provide access to permitted structures, and facilities located nearer to the shoreline or tributary stream due to an operational necessity, excluding temporary docks for recreational uses. Roads and driveways providing access to permitted structures within the setback area shall comply fully with the requirements of Section 15(H)(1) except for that portion of the road or driveway necessary for direct access to the structure.

- (2) Existing public roads may be expanded within the legal road right of way regardless of its their setback from a water body, tributary stream or wetland.
- (3) New permanent roads are not <u>permitted\_allowed</u> within the shoreland zone along Significant River Segments except:
  - (a) To provide access to structures or facilities within the zone; or
  - (b) When the applicant demonstrates that no reasonable alternative route exists outside the shoreland zone. When roads must be located within the shoreland zone they shall be set back as far as practicable from the normal high-water line and screened from the river by existing vegetation.
- (4) New roads and driveways are prohibited in a Resource Protection District except that the Planning Board may grant a permit to construct a road or driveway to provide access to permitted uses within the district. A road or driveway may also be or as approved by the Planning Board in a Resource Protection District, upon a finding that no reasonable alternative route or location is available outside the district. in which case When a road or driveway is permitted in a Resource Protection District the road and/or driveway shall be set back as far as practicable from the normal high-water line of a water body, tributary stream, or upland edge of a wetland.
- (5) Road <u>and driveway</u> banks shall be no steeper than a slope of two (2) horizontal to one (1) vertical, and shall be graded and stabilized in accordance with the provisions for erosion and sedimentation control contained in <u>subsSection 15(Q)</u>.
- (6) Road<u>and driveway</u> grades shall be no greater than ten (10) percent except for <del>short</del> segments of less than two hundred (200) feet.
- (7) In order to prevent road and driveway surface drainage from directly entering water bodies, tributary streams or wetlands, roads and driveways shall be designed, constructed, and maintained to empty onto an unscarified buffer strip at least (50) feet plus two times the average slope, in width between the outflow point of the ditch or culvert and the normal highwater line of a water body, tributary stream, or upland edge of a wetland. Road sSurface drainage which is directed to an unscarified buffer strip shall be diffused or spread out to promote infiltration of the runoff and to minimize channelized flow of the drainage through the buffer strip.

- (8) Ditch relief (cross drainage) culverts, drainage dips and water turnouts shall be installed in a manner effective in directing drainage onto unscarified buffer strips before the flow in the road or ditches—gains sufficient volume or head to erode the road, driveway, or ditch. To accomplish this, the following shall apply:
  - (a) Ditch relief culverts, drainage dips and associated water turnouts shall be spaced along the road, or driveway at intervals no greater than indicated in the following table:

| Road-Grade | Spacing |
|------------|---------|
| (Percent)  | (Feet)  |
| 0-2        | 250     |
| 3-5        | 200-135 |
| 6-10       | 100-80  |
| 11-15      | 80-60   |
| 16-20      | 60-45   |
| 21 +       | 40      |

- (b) Drainage dips may be used in place of ditch relief culverts only where the <del>road</del>-grade is ten (10) percent or less.
- (c) On road-sections having slopes greater than ten (10) percent, ditch relief culverts shall be placed across the road at approximately a thirty (30) degree angle downslope from a line perpendicular to the centerline of the road or driveway.
- (d) Ditch relief culverts shall be sufficiently sized and properly installed in order to allow for effective functioning, and their inlet and outlet ends shall be stabilized with appropriate materials.
- (9) Ditches, culverts, bridges, dips, water turnouts and other storm water runoff control installations associated with roads and driveways shall be maintained on a regular basis to assure effective functioning.
- I Signs. The following provisions shall govern the use of signs in the Resource Protection, Stream Protection, Limited Residential and Limited Commercial Districts:
  - (1) Signs and billboards relating to goods and services sold on the premises shall be permitted allowed, provided that such signs shall not exceed six (6) square feet in area and shall not exceed two (2) signs per premises. In the Limited Commercial District, however, such signs shall not exceed sixteen (16) square feet in area. Billboards and sSigns relating to goods or services not sold or rendered on the premises shall be prohibited.
  - (2) Name signs shall beare permitted allowed, provided such signs shall not exceed two (2) signs per premises, and shall not exceed twelve (12) square feet in the aggregate.
  - (3) Residential users may display a single sign not over three (3) square feet in area relating to the sale, rental, or lease of the premises.

- (4) Signs relating to trespassing and hunting shall be <u>permitted\_allowed\_without restriction</u> as to number provided that no such sign shall exceed two (2) square feet in area.
- (5) Signs relating to public safety shall be permitted allowed without restriction.
- (6) No sign shall extend higher than twenty (20) feet above the ground.
- (7) Signs may be illuminated only by shielded, non-flashing lights.

## J. Storm Water Runoff

- (1) All new construction and development shall be designed to minimize storm water runoff from the site in excess of the natural predevelopment conditions. Where possible, existing natural runoff control features, such as berms, swales, terraces and wooded areas, shall be retained in order to reduce runoff and encourage infiltration of stormwaters.
- (2) Storm water runoff control systems shall be maintained as necessary to ensure proper functioning.

NOTE: The Stormwater Management Law (38 M.R.S.A. section 420-D) requires a full permit to be obtained from the DEP prior to construction of a project consisting of 20,000 square feet or more of impervious area or 5 acres or more of a developed area in an urban impaired stream watershed or most-at-risk lake watershed, or a project with 1 acre or more of developed area in any other stream, coastal or wetland watershed. A permit-by-rule is necessary for a project with one acre or more of disturbed area but less than 1 acre impervious area (20,000 square feet for most-at-risk lakes and urban impaired streams) and less than 5 acres of developed area. Furthermore, a Maine Construction General Permit is required if the construction will result in one acre or more of disturbed area.

# K. Septic Waste Disposal

(1) All subsurface sewage disposal systems shall be installed in conformance with the State of Maine Subsurface Wastewater Disposal Rules (Rules), and the following: a) clearing or removal of woody vegetation necessary to site a new system and any associated fill extensions, shall not extend closer than seventy-five (75) feet, horizontal distance, from the normal high-water line of a water body or the upland edge of a wetland and b) a holding tank is not allowed for a first-time residential use in the shoreland zone.

NOTE: The Maine Subsurface Wastewater Disposal Rules require new systems, excluding fill extensions, to be constructed no less than one hundred (100) horizontal feet from the normal high-water line of a perennial water body. The minimum setback distance for a new subsurface disposal system may not be reduced by variance, among other requirements, include:

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A. The minimum setback for new subsurface sewage disposal systems, shall be no less than one hundred (100) horizontal feet from the normal high water line of a perennial water body. The minimum setback distances from water bodies for new subsurface sewage disposal systems shall not be reduced by variance.

B. Replacement systems shall meet the standards for replacement systems as contained in the Rules.

#### L. Essential Services

- (1) Where feasible, the installation of essential services shall be limited to existing public ways and existing service corridors.
- (2) (2)—The installation of essential services, other than road-side distribution lines, is not permitted allowed in a Resource Protection or Stream Protection District, except to provide services to a permitted use within said district, or except where the applicant demonstrates that no reasonable alternative exists. Where permitted allowed, such structures and facilities shall be located so as to minimize any adverse impacts on surrounding uses and resources, including visual impacts.
- (3) Damaged or destroyed public utility transmission and distribution lines, towers and related equipment may be replaced or reconstructed without a permit.
- M. Mineral Exploration and Extraction. Mineral exploration to determine the nature or extent of mineral resources shall be accomplished by hand sampling, test boring, or other methods which create minimal disturbance of less than one hundred (100) square feet of ground surface. A permit from the Code Enforcement Officer shall be required for mineral exploration which exceeds the above limitation. All excavations, including test pits and holes, shall be immediately capped, filled or secured by other equally effective measures, so as to restore disturbed areas and to protect the public health and safety.

Mineral extraction may be permitted under the following conditions:

- (1) A reclamation plan shall be filed with, and approved, by the Planning Board before a permit is granted. Such plan shall describe in detail procedures to be undertaken to fulfill the requirements of Section 15 (M)(4)paragraph 4 below.
- (2) Unless authorized pursuant to the Natural Resources Protection Act, Title 38, M.R.S.A., Section 480 C nNo part of any extraction operation, including drainage and runoff control features, shall be permitted within one hundred (100) feet, horizontal distance, of the normal high-water line of a great pond classified GPA or a river flowing to a great pond classified GPA, and within seventy-five (75) feet, horizontal distance, of the normal high-water line of any other water body, tributary stream, or the upland edge of a wetland. Extraction operations shall not be permitted within fifty (50)seventy five (75) feet, horizontal distance, of any property line; without written permission of the owner of such adjacent property.
- (3) Developers of new gravel pits along Significant River Segments shall demonstrate that no reasonable mining site outside the shoreland zone exists. When gravel pits must be located within the zone, they shall be set back as far as practicable from the normal high-water line and no less than seventy-five (75) feet and screened from the river by existing vegetation.
- (4) Within twelve (12) months following the completion of extraction operations at any extraction site, which operations shall be deemed complete when less than one hundred (100)

cubic yards of materials are removed in any consecutive twelve (12) month period, ground levels and grades shall be established in accordance with the following:

(a) All debris, stumps, and similar material shall be removed for disposal in an approved location, or shall be buried on-site. Only materials generated on-site may be buried or covered on-site.

NOTE: The State of Maine Solid Waste Laws, Title—38, Maine\_—Revised\_—S\_tatutes—A\_nnotated, sSection 1310-1301 and Chapter 404 of the solid waste management rules, Chapters 400-419 of the Department of Environmental Protection's regulations may contain other applicable provisions regarding disposal of such materials.

- (b) The final graded slope shall be two and one-half to one  $(2 \frac{1}{2}:1)$  slope or flatter.
- (c) Top soil or loam shall be retained to cover all disturbed land areas, which shall be reseeded and stabilized with vegetation native to the area. Additional topsoil or loam shall be obtained from off-site sources if necessary to complete the stabilization project.
- (5) In keeping with the purposes of this Ordinance, the Planning Board may impose such conditions as are necessary to minimize the adverse impacts associated with mineral extraction operations on surrounding uses and resources.

## N. Agriculture

- (1) All spreading or disposal of manure shall be accomplished in conformance with the Maine Guidelines for Manure and Manure Sludge Disposal on Land published by the University of Maine Soil and Water Conservation Commission in July, 1972 Manure Utilization Guidelines published by the Maine Department of Agriculture on November 1, 2001, and the Nutrient Management Law (7 M.R.S.A. sections 4201-4209).
- (2) Manure shall not be stored or stockpiled within one hundred (100) feet, horizontal distance, of a great pond classified GPA or a river flowing to a great pond, classified GPA, or within seventy-five (75) feet horizontal distance, of other water bodies, tributary streams, or wetlands. Within five (5) years of the effective date of this All ordinance all manure storage areas within the shoreland zone must be constructed or modified such that the facility produces no discharge of effluent or contaminated storm water. Existing facilities which do not meet the setback requirement may remain, but must meet the no discharge provision within the above five (5) year period.
- (3) Agricultural activities involving tillage of soil greater than forty thousand (40,000) square feet in surface area, or the spreading, disposal or storage of manure within the shoreland zone shall require a Soil and Water Conservation Plan to be filed with the Planning Board. Nonconformance with the provisions of said plan shall be considered to be a violation of this Ordinance.

NOTE: Assistance in preparing a soil and water conservation Conservation plan Plan may be available through the local Soil and Water Conservation District office.

- (4) There shall be no new tilling of soil within one-hundred (100) feet, horizontal distance, of the normal high-water line of a great pond classified GPA; within seventy-five (75) feet, horizontal distance, from other water bodies and coastal wetlands; nor within twenty-five (25) feet, horizontal distance, of tributary streams, and freshwater wetlands. Operations in existence on the effective date of this ordinance and not in conformance with this provision may be maintained.
- (5) (5) After the effective date of this Ordinance, Nnewly established livestock grazing areas shall not be permitted within one hundred (100) feet, horizontal distance, of the normal highwater line of a great pond classified GPA; within seventy-five (75) feet, horizontal distance, of other water bodies and coastal wetlands, nor; within twenty-five (25) feet, horizontal distance, of tributary streams, and freshwater wetlands. Livestock grazing associated with ongoing farm activities, and which are not in conformance with the above setback provisions may continue, provided that such grazing is conducted in accordance with a Soil and Water Conservation Plan.

NOTE: 17 M.R.S.A. section 2805(4) requires a municipality to provide the Commissioner of Agriculture, Food and Rural Resources with a copy of any proposed ordinance that impacts farm operations. The law further requires the Commissioner to review the proposed ordinance and advise the municipality if the proposed ordinance would restrict or prohibit the use of best management practices. A copy of a shoreland zoning ordinance that regulates no more restrictively than contained in these Guidelines need not be provided to the Commissioner of Agriculture, Food and Rural Resources.

## NOTE RELATING TO TIMBER HARVESTING STANDARDS:

Title 38 MRSA section 438-B of the Mandatory Shoreland Zoning Act addresses timber harvesting and timber harvesting activities in shoreland areas. Section 438-B establishes three options from which each municipality may choose as the State moves toward a set of statewide timber harvesting standards in shoreland areas.

Option 1: The first option available to a municipality is the complete repeal of timber harvesting provisions from the shoreland zoning ordinance. Section 438-B(2) states:

A municipality may choose to have the statewide standards apply to timber harvesting and timber harvesting activities in that municipality by authorizing the repeal of all provisions within the municipal shoreland zoning ordinance that regulate timber harvesting and timber harvesting activities in shoreland areas and notifying the Director of the Bureau of Forestry within the Department of Conservation of the repeal. The authorization must specify a repeal date that is consistent with the effective date of the statewide timber harvesting standards. Then, beginning on the effective date of the statewide standards, the Bureau of Forestry will administer and enforce those standards within that municipality.

Option 2: The second option available to the municipality is the adoption of timber harvesting standards within the shoreland zoning ordinance that are identical to the statewide standards. Section 438-B(3) states:

A municipality may adopt an ordinance to regulate timber harvesting and timber harvesting activities that is identical to the statewide standards. A municipality that adopts an ordinance under this subsection may request the director of the Bureau of Forestry to administer and enforce the ordinance or to participate in joint administration and enforcement of the ordinance with the municipality beginning on

the effective date of the statewide standards. This option retains local control over the administration and enforcement of timber harvesting in the shoreland zone, while receiving assistance and expertise from staff of the Bureau of Forestry. If the municipality requests joint responsibilities, the director and the municipality must enter into an agreement that delineates the administrative and enforcement duties of each. To continue to receive administrative and enforcement assistance from the Bureau of Forestry, a municipality must amend its ordinance as necessary to maintain identical provisions with the statewide standards.

Option 3: The third option is that a municipality may elect to simply retain its current timber harvesting standards. However, a municipality that retains an ordinance with provisions that differ from the statewide standards must administer and enforce that ordinance, and will not receive the assistance of the Bureau of Forestry. Furthermore, after the legislative effective date of the statewide standards, a municipality may not amend an ordinance regulating timber harvesting and timber harvesting activities in a manner that results in standards that are less stringent than or otherwise conflict with the statewide standards (Section 438-B(4)).

The event that triggers the effective date of the "statewide standards" has been legislatively established. The standards will apply statewide beginning on the first day of January of the 2<sup>nd</sup> year following the year in which the Commissioner of Conservation determines that at least 252 of the 336 municipalities identified by the Commissioner of Conservation as the municipalities with the highest acreage of timber harvesting activity on an annual basis for the period 1999-2003 have either accepted the statewide standards or have adopted an ordinance identical to the statewide standards.

For those municipalities that choose option 2, these Guidelines contain timber harvesting standards that are identical to the statewide standards (Section 15(O-1)). They are written in a form that can be enacted prospectively, with the effective date linked to the legislative effective date of the statewide standards. On that effective date, Section 15(O) will be repealed and replaced with Section 15(O-1) and the municipality will begin administering the statewide timber harvesting standards for shoreland areas. If the municipality also enters into an agreement with the Bureau of Forestry delineating the administrative and enforcement duties of each party, the municipality will receive assistance in those aspects of the Ordinance from the Bureau of Forestry.

If a municipality chooses option 1, completely repealing the municipal regulation of timber harvesting activities in the shoreland zone and deferring the regulation of timber harvesting activities to the Bureau of Forestry, the ordinance must include "transition" language because the repeal of timber harvesting regulations in a municipality cannot occur until the statewide standards become effective. For those municipalities that wish to ultimately repeal their timber harvesting regulations the Department recommends that Section 15(P) be retained, along with repeal language (modified Section 4(B)) that would take effect on the date that the state-wide standards become effective. The repeal language should include the specific sections that will be repealed when the legislative effective date arrives. This would include all references to timber harvesting regulations, including:

- 1. Section 14, Table 1, *Land Uses in the Shoreland Zone*, Item 3 (forest management activities except for timber harvesting & land management roads), Item 4 (timber harvesting), and Item 27 (land management roads) of the Table;
- 2. Section 15(O) in its entirety (Section 15(O-1) would not have been adopted by those municipalities that had elected to retain section 15(O), so there would be no need to repeal section 15(O-1)); and

3. All definitions in Section 17 pertaining to timber harvesting and forest management activities, including the terms: Cross-sectional area, DBH, Disruption of shoreline integrity, Forest management activities, Forest stand, Harvest area, Land management road, Licensed forester, Residual basal area, Residual stand, Skid road or skid trail, Slash, Timber harvesting, Timber harvesting and related activities, and Wind firm.

A municipality that chooses option 3, retaining or adopting timber harvesting and forest management activities regulations that differ from the statewide standards, will simply adopt Section 15(O) or adopt/retain other consistent standards approved by the Department. These municipalities will not adopt Section 15(O-1), the new definitions listed above or the repeal language at Section 4(B). Municipal officials must remember that any future amendments to ordinances that have maintained the earlier timber harvesting standards must, thereafter, be consistent with the statewide standards, once those statewide standards become effective.

Some municipalities have questioned whether the statewide timber harvesting standards can be adopted and administered locally before the statewide standards become effective. The answer is yes, in part. The statewide standards contain three alternatives that a landowner may choose to satisfy the requirement of leaving "adequate tree cover" and retaining a "well-distributed stand of trees. The first alternative (Section 15(O-1)(3)(a)) is based on the removal of up to 40% of the volume of trees in a 10 year period. This option is very similar to the standard that has been in place for many years. The second alternative (Section 15(O-1)(3)(b)) bases the allowed harvest not on volume removal, but on retaining at least 60 square feet of basal area. Either or both alternatives can be enacted and administered before the statewide standards are effective. The third alternative (Section 15(O-1)(3)(c)) bases the permitted harvest on an outcome-based plan which provides equal or better protection of the shoreland area than the other two alternatives. This option is only available if the plan is signed by a Licensed Forester, and approved by the Bureau of Forestry. However, since the Bureau of Forestry will not be actively participating in the administration of the statewide standards until the legislative effective date, a municipal ordinance that includes the outcome based alternative that is immediately effective will not be approved before that date. Thus, if a municipality wishes to adopt and administer the standards in Section 15(O-1) immediately, it must adopt only alternatives one and two as described above, or draft the ordinance such that the optionbased alternative in Section 15(O-1)(3)(c) does not become effective until the legislative effective date of the statewide standards.

# **PO.** Timber Harvesting

- (1) In a shoreland area zoned for rResource Pprotection District abutting a great pond, timber harvesting shall be limited to the following:
  - (a) Within the strip of land extending 75 feet, horizontal distance, inland from the normal high-water line, timber harvesting may be conducted when the following conditions are met:
    - (1) The ground is frozen;
    - (2) There is no resultant soil disturbance;
    - (3) The removal of trees is accomplished using a cable or boom and there is no entry of tracked or wheeled vehicles into the 75-foot strip of land;
    - (4) There is no cutting of trees less than 6 inches in diameter; no more than 30% of the trees 6 inches or more in diameter, measured at 4 ½ feet above ground level, are cut

- in any 10-year period; and a well-distributed stand of trees and other natural vegetation remains; and
- (5) A licensed professional forester has marked the trees to be harvested prior to a permit being issued by the municipality.
- (b) Beyond the 75 foot strip referred to in Section 15(O)(1)(a)paragraph a. above, timber harvesting is permitted in accordance with paragraph 2 below except that in no case shall the average residual basal area of trees over 4 ½ inches in diameter at 4 1/2 feet above ground level be reduced to less than 30 square feet per acre.

NOTE: Consistent with 38 M.R.S.A. section 439-A(5)(B), a municipality may elect to replace subparagraph 15(O)(1)(a) with the following: (a) Within the strip of land extending 75 feet inland from the normal high-water line in a shoreland area zoned for resource protection abutting a great pond there shall be no timber harvesting except to remove safety hazards.

- (2) Except in areas as described in <u>Section 15(O)(1)</u><del>Paragraph 1</del> above, timber harvesting shall conform with the following provisions:
  - (a) Selective cutting of no more than forty (40) percent of the total volume of trees four (4) inches or more in diameter measured at 4 1/2 feet above ground level on any lot in any ten (10) year period is permitted. In addition:
    - (i) Within one-hundred (100) feet, horizontal distance, of the normal high-water line of a great pond classified GPA or a river flowing to a great pond classified GPA, and within seventy-five (75) feet, horizontal distance, of the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland, there shall be no clearcut openings and a well-distributed stand of trees and other vegetation, including existing ground cover, shall be maintained.
    - (ii) At distances greater than one-hundred (100) feet, horizontal distance, of a great pond classified GPA or a river flowing to a great pond classified GPA, and greater than seventy-five (75) feet, horizontal distance, of the normal high-water line of other water bodies or the upland edge of a wetland, harvesting operations shall not create single clearcut openings greater than ten-thousand (10,000) square feet in the forest canopy. Where such openings exceed five-thousand (5000) square feet they shall be at least one hundred (100) feet, horizontal distance, apart. Such clearcut openings shall be included in the calculation of total volume removal. For the purposes of these standards vVolume may be considered to be equivalent to basal area.

NOTE: Subparagraph 15 (O)(2)(b) below, should be included only if a municipality desires to permit harvesting operations to exceed 40% of the volume of trees in a 10-year period if necessary for good forest management. The adoption of subparagraph 15(O)(2)(b) is not a requirement.

(b) Timber harvesting operations exceeding the 40% limitation in <u>Section 15(O)(2)(a)paragraph a.</u> above, may be allowed by the planning board upon a clear showing, including a forest management plan signed by a Maine licensed professional forester, that such an exception is necessary for good forest management and will be

- carried out in accordance with the purposes of this Ordinance. The planning board shall notify the Commissioner of the Department of Environmental Protection of each exception allowed, within fourteen (14) days of the planning board's decision.
- (c) No accumulation of slash shall be left within fifty (50) feet, horizontal distance, of the normal high-water line of a water body. In all other areas slash shall either be removed or disposed of in such a manner that it lies on the ground and no part thereof extends more than four (4) feet above the ground. Any debris that falls below the normal highwater line of a water body or tributary stream shall be removed.
- (d) Timber harvesting equipment shall not use stream channels as travel routes except when:
  - (i) Surface waters are frozen; and
  - (ii) The activity will not result in any ground disturbance.
- (e) All crossings of flowing water shall require a bridge or culvert, except in areas with low banks and channel beds which are composed of gravel, rock or similar hard surface which would not be eroded or otherwise damaged.
- (f) Skid trail approaches to water crossings shall be located and designed so as to prevent water runoff from directly entering the water body or tributary stream. Upon completion of timber harvesting, temporary bridges and culverts shall be removed and areas of exposed soil revegetated.
- (g) Except for water crossings, skid trails and other sites where the operation of machinery used in timber harvesting results in the exposure of mineral soil shall be located such that an unscarified strip of vegetation of at least seventy-five (75) feet, horizontal distance, in width for slopes up to ten (10) percent shall be retained between the exposed mineral soil and the normal high-water line of a water body or upland edge of a wetland. For each ten (10) percent increase in slope, the unscarified strip shall be increased by twenty (20) feet, horizontal distance. The provisions of this paragraph apply only to a face sloping toward the water body or wetland, provided, however, that no portion of such exposed mineral soil on a back face shall be closer than twenty five (25) feet, horizontal distance, from the normal high-water line of a water body or upland edge of a wetland.

# O-1. Timber Harvesting – Statewide Standards [Effective on effective date established in Section 4(B)]

(1) Shoreline integrity and sedimentation. Persons conducting timber harvesting and related activities must take reasonable measures to avoid the disruption of shoreline integrity, the occurrence of sedimentation of water, and the disturbance of water body and tributary stream banks, water body and tributary stream channels, shorelines, and soil lying within water bodies, tributary streams and wetlands. If, despite such precautions, the disruption of shoreline integrity, sedimentation of water, or the disturbance of water body and tributary stream banks, water body and tributary stream channels, shorelines, and soil lying within water bodies, tributary streams and wetlands occurs, such conditions must be corrected.

- (2) Slash treatment. Timber harvesting and related activities shall be conducted such that slash or debris is not left below the normal high-water line of any water body or tributary stream, or the upland edge of a wetland. Section 15(O-1)(2) does not apply to minor, incidental amounts of slash that result from timber harvesting and related activities otherwise conducted in compliance with this section.
  - (a) Slash actively used to protect soil from disturbance by equipment or to stabilize exposed soil, may be left in place, provided that no part thereof extends more than 4 feet above the ground.
  - (b) Adjacent to great ponds, rivers and wetlands:
    - (i) No accumulation of slash shall be left within 50 feet, horizontal distance, of the normal high-water line or upland edge of a wetland; and
    - (ii) Between 50 feet and 250 feet, horizontal distance, of the normal high-water line or upland edge of a wetland, all slash larger than 3 inches in diameter must be disposed of in such a manner that no part thereof extends more than 4 feet above the ground.
- (3) Timber harvesting and related activities must leave adequate tree cover and shall be conducted so that a well-distributed stand of trees is retained. This requirement may be satisfied by following one of the following three options:
  - (a) Option 1 (40% volume removal), as follows:
    - (i) Harvesting of no more than 40 percent of the total volume on each acre of trees 4.5 inches DBH or greater in any 10 year period is allowed. Volume may be considered to be equivalent to basal area;
    - (ii) A well-distributed stand of trees which is windfirm, and other vegetation including existing ground cover, must be maintained; and,
    - (iii) Within 75 feet, horizontal distance, of the normal high-water line of rivers, streams, and great ponds, and within 75 feet, horizontal distance, of the upland edge of a freshwater or coastal wetlands, there must be no cleared openings. At distances greater than 75 feet, horizontal distance, of the normal high-water line of a river or great pond or upland edge of a wetland, timber harvesting and related activities must not create single cleared openings greater than 14,000 square feet in the forest canopy. Where such openings exceed 10,000 square feet, they must be at least 100 feet, horizontal distance, apart. Such cleared openings will be included in the calculation of total volume removal. Volume may be considered equivalent to basal area.
  - (b) Option 2 (60 square foot basal area retention), as follows:
    - (i) The residual stand must contain an average basal area of at least 60 square feet per acre of woody vegetation greater than or equal to 1.0 inch DBH, of which 40 square feet per acre must be greater than or equal to 4.5 inches DBH;

- (ii) A well-distributed stand of trees which is windfirm, and other vegetation including existing ground cover, must be maintained; and,
- (iii)Within 75 feet, horizontal distance, of the normal high-water line of water bodies and within 75 feet, horizontal distance, of the upland edge of wetlands, there must be no cleared openings. At distances greater than 75 feet, horizontal distance, of the normal high-water line of a river or great pond, or upland edge of a wetland, timber harvesting and related activities must not create single cleared openings greater than 14,000 square feet in the forest canopy. Where such openings exceed 10,000 square feet, they must be at least 100 feet, horizontal distance, apart. Such cleared openings will be included in the calculation of the average basal area. Volume may be considered equivalent to basal area.
- (c) Option 3 (Outcome based), which requires: An alternative method proposed in an application, signed by a Licensed Forester or certified wildlife professional, submitted by the landowner or designated agent to the State of Maine Department of Conservation's Bureau of Forestry (Bureau) for review and approval, which provides equal or better protection of the shoreland area than this rule.

Landowners must designate on the Forest Operations Notification form required by 12 M.R.S.A. chapter 805, subchapter 5 which option they choose to use. If landowners choose Option 1 or Option 2, compliance will be determined solely on the criteria for the option chosen. If landowners choose Option 3, timber harvesting and related activities may not begin until the Bureau has approved the alternative method.

The Bureau may verify that adequate tree cover and a well-distributed stand of trees is retained through a field procedure that uses sample plots that are located randomly or systematically to provide a fair representation of the harvest area.

- (4) Skid trails, yards, and equipment operation. This requirement applies to the construction, maintenance, and use of skid trails and yards in shoreland areas.
  - (a) Equipment used in timber harvesting and related activities shall not use river, stream or tributary stream channels as travel routes except when surface waters are frozen and snow covered, and the activity will not result in any ground disturbance.
  - (b) Skid trails and yards must be designed and constructed to prevent sediment and concentrated water runoff from entering a water body, tributary stream, or wetland. Upon termination of their use, skid trails and yards must be stabilized.

#### (c) Setbacks:

(i) Equipment must be operated to avoid the exposure of mineral soil within 25 feet, horizontal distance, of any water body, tributary stream, or wetland. On slopes of 10 percent or greater, the setback for equipment operation must be increased by 20 feet, horizontal distance, plus an additional 10 feet, horizontal distance, for each 5 percent increase in slope above 10 percent. Where slopes fall away from the resource, no increase in the 25-foot setback is required.

- (ii) Where such setbacks are impracticable, appropriate techniques shall be used to avoid sedimentation of the water body, tributary stream or wetland. Such techniques may include the installation of sump holes or settling basins, and/or the effective use of additional ditch relief culverts and ditch water turnouts placed to avoid sedimentation of the water body, tributary stream, or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.
- (5) Land Management Roads. Land management roads, including approaches to crossings of water bodies, tributary stream channels, and freshwater wetlands, ditches and other related structures, must be designed, constructed, and maintained to prevent sediment and concentrated water runoff from directly entering the water body, tributary stream or wetland. Surface water on or adjacent to water crossing approaches must be diverted through vegetative filter strips to avoid sedimentation of the watercourse or wetland. Because roadside ditches may not extend to the resource being crossed, vegetative filter strips must be established in accordance with the setback requirements in Section 15(O-1)(7) of this rule.
  - (a) Land management roads and associated ditches, excavation, and fill must be set back at least:
    - (i) 100 feet, horizontal distance, from the normal high-water line of a great pond, river or freshwater or coastal wetland;
    - (ii) 50 feet, horizontal distance, from the normal high-water line of streams; and
    - (iii) 25 feet, horizontal distance, from the normal high-water line of tributary streams
  - (b) The minimum 100 foot setback specified in Section 15(O-1)(5)(a)(i) above may be reduced to no less than 50 feet, horizontal distance, and the 50 foot setback specified in Section 15(O-1)(5)(a)(ii) above may be reduced to no less than 25 feet, horizontal distance, if, prior to construction, the landowner or the landowner's designated agent demonstrates to the Planning Board's satisfaction that no reasonable alternative exists and that appropriate techniques will be used to prevent sedimentation of the water body, tributary stream, or wetland. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed to avoid sedimentation of the water body, tributary stream or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.
  - (c) On slopes of 10 percent or greater, the land management road setback must be increased by at least 20 feet, horizontal distance, plus an additional 10 feet, horizontal distance, for each 5 percent increase in slope above 10 percent.
  - (d) New land management roads are not allowed within the shoreland area along Significant River Segments as identified in 38 M.R.S.A. section 437, nor in a Resource Protection District, unless, prior to construction, the landowner or the landowner's designated agent makes a clear demonstration to the Planning Board's satisfaction that no reasonable alternative route exists outside the shoreland zone, and that the new road must be set back as far as practicable from the normal high-water line and screened from the river by existing vegetation.

- (e) Ditches, culverts, bridges, dips, water turnouts and other water control installations associated with roads must be maintained on a regular basis to assure effective functioning. Drainage structures shall deliver a dispersed flow of water into an unscarified filter strip no less than the width indicated in the setback requirements in Section 15(O-1)(7). Where such a filter strip is impracticable, appropriate techniques shall be used to avoid sedimentation of the water body, tributary stream, or wetland. Such techniques may include the installation of sump holes or settling basins, and/or the effective use of additional ditch relief culverts and ditch water turnouts placed to avoid sedimentation of the water body, tributary stream, or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.
- (f) Road closeout and discontinuance. Maintenance of the water control installations required in Section 15(O-1)(5)(e) must continue until use of the road is discontinued and the road is put to bed by effective installation of water bars or other adequate road drainage structures at appropriate intervals, constructed to avoid surface water flowing over or under the water bar, and extending a sufficient distance beyond the traveled way so that water does not reenter the road surface.
- (g) Upgrading existing roads. Extension or enlargement of presently existing roads must conform to the provisions of Section 15(O-1). Any nonconforming existing road may continue to exist and to be maintained, as long as the nonconforming conditions are not made more nonconforming.
- (h) Exception. Extension or enlargement of presently existing roads need not conform to the setback requirements of Section 15(O-1)(5)(a) if, prior to extension or enlargement, the landowner or the landowner's designated agent demonstrates to the Planning Board's satisfaction that no reasonable alternative exists and that appropriate techniques will be used to prevent sedimentation of the water body, tributary stream, or wetland. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed to avoid sedimentation of the water body, tributary stream, or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.
- (i) Additional measures. In addition to the foregoing minimum requirements, persons undertaking construction and maintenance of roads and river, stream and tributary stream crossings must take reasonable measures to avoid sedimentation of surface waters.
- (6) Crossings of waterbodies. Crossings of rivers, streams, and tributary streams must allow for fish passage at all times of the year, must not impound water, and must allow for the maintenance of normal flows.
  - (a) Determination of flow. Provided they are properly applied and used for the circumstances for which they are designed, methods including but not limited to the following are acceptable as a means of calculating the 10 year and 25 year frequency water flows and thereby determining water crossing sizes as required in Section 15(O-1): The United States Geological Survey (USGS) Methods; specifically: Hodgkins, G. 1999. Estimating the Magnitude of Peak Flows for Streams in Maine for Selected Recurrence Intervals. U.S. Geological Survey. Water Resources Investigations Report 99-4008. 45 pp.

- (b) Upgrading existing water crossings. Extension or enlargement of presently existing water crossings must conform to the provisions of Section 15(O-1). Any nonconforming existing water crossing may continue to exist and be maintained, as long as the nonconforming conditions are not made more nonconforming; however, any maintenance or repair work done below the normal high-water line must conform to the provisions of Section 15(O-1).
- (c) Other Agency Permits. Any timber harvesting and related activities involving the design, construction, and maintenance of crossings on waterbodies other than a river, stream or tributary stream may require a permit from the Land Use Regulation Commission, the Department of Environmental Protection, or the US Army Corps of Engineers.
- (d) Any timber harvesting and related activities involving the design, construction, and maintenance of crossings of freshwater wetlands identified by the Department of Inland Fisheries and Wildlife as essential wildlife habitat require prior consultation with the Department of Inland Fisheries and Wildlife.
- (e) Notice to Bureau of Forestry. Written notice of all water crossing construction maintenance, alteration and replacement activities in shoreland areas must be given to the Bureau prior to the commencement of such activities. Such notice must contain all information required by the Bureau, including:
  - (i) a map showing the location of all proposed permanent crossings;
  - (ii) the GPS location of all proposed permanent crossings;
  - (iii) for any temporary or permanent crossing that requires a permit from state or federal agencies, a copy of the approved permit or permits; and
  - (iv) a statement signed by the responsible party that all temporary and permanent crossings will be constructed, maintained, and closed out in accordance with the requirements of this Section.
- (f) Water crossing standards. All crossings of rivers require a bridge or culvert sized according to the requirements of Section 15(O-1)(6)(g)) below. Streams and tributary streams may be crossed using temporary structures that are not bridges or culverts provided:
  - (i) concentrated water runoff does not enter the stream or tributary stream;
  - (ii) sedimentation of surface waters is reasonably avoided;
  - (iii) there is no substantial disturbance of the bank, or stream or tributary stream channel;
  - (iv) fish passage is not impeded; and,
  - (v) water flow is not unreasonably impeded.

Subject to Section 15(O-1)(6)(f)(i-v) above, skid trail crossings of streams and tributary streams when channels of such streams and tributary streams are frozen and snow-covered or are composed of a hard surface which will not be eroded or otherwise damaged are not required to use permanent or temporary structures.

- (g) Bridge and Culvert Sizing. For crossings of river, stream and tributary stream channels with a bridge or culvert, the following requirements apply:
  - (i) Bridges and culverts must be installed and maintained to provide an opening sufficient in size and structure to accommodate 10 year frequency water flows or with a cross-

- sectional area at least equal to 2 1/2 times the cross-sectional area of the river, stream, or tributary stream channel.
- (ii) Temporary bridge and culvert sizes may be smaller than provided in Section 15(O-1)(6)(g)(i) if techniques are effectively employed such that in the event of culvert or bridge failure, the natural course of water flow is maintained and sedimentation of the water body or tributary stream is avoided. Such crossing structures must be at least as wide as the channel and placed above the normal high-water line. Techniques may include, but are not limited to, the effective use of any, a combination of, or all of the following:
  - 1. use of temporary skidder bridges;
  - 2. removing culverts prior to the onset of frozen ground conditions;
  - 3. using water bars in conjunction with culverts;
  - 4. using road dips in conjunction with culverts.
- (iii) Culverts utilized in river, stream and tributary stream crossings must:
  - 1. be installed at or below river, stream or tributary stream bed elevation;
  - 2. be seated on firm ground;
  - 3. have soil compacted at least halfway up the side of the culvert;
  - 4. be covered by soil to a minimum depth of 1 foot or according to the culvert manufacturer's specifications, whichever is greater; and
  - 5. have a headwall at the inlet end which is adequately stabilized by riprap or other suitable means to reasonably avoid erosion of material around the culvert.
- (iv)River, stream and tributary stream crossings allowed under Section 15(O-1), but located in flood hazard areas (i.e. A zones) as identified on a community's Flood Insurance Rate Maps (FIRM) or Flood Hazard Boundary Maps (FHBM), must be designed and constructed under the stricter standards contained in that community's National Flood Insurance Program (NFIP). For example, a water crossing may be required to pass a 100year flood event.
- (v) Exception. Skid trail crossings of tributary streams within shoreland areas and wetlands adjacent to such streams may be undertaken in a manner not in conformity with the requirements of the foregoing subsections provided persons conducting such activities take reasonable measures to avoid the disruption of shoreline integrity, the occurrence of sedimentation of water, and the disturbance of stream banks, stream channels, shorelines, and soil lying within ponds and wetlands. If, despite such precautions, the disruption of shoreline integrity, sedimentation of water, or the disturbance of stream banks, stream channels, shorelines, and soil lying within ponds and wetlands occurs, such conditions must be corrected.
- (h) Skid trail closeout. Upon completion of timber harvesting and related activities, or upon the expiration of a Forest Operations Notification, whichever is earlier, the following requirements apply:
  - (i) Bridges and culverts installed for river, stream and tributary stream crossings by skid trails must either be removed and areas of exposed soil stabilized, or upgraded to comply with the closeout standards for land management roads in Section15(O-1)(6)(i) below.

- (ii) Water crossing structures that are not bridges or culverts must either be removed immediately following timber harvesting and related activities, or, if frozen into the river, stream or tributary stream bed or bank, as soon as practical after snowmelt.
- (iii) River, stream and tributary stream channels, banks and approaches to crossings of water bodies and tributary streams must be immediately stabilized on completion of harvest, or if the ground is frozen and/or snow-covered, as soon as practical after snowmelt. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.
- (i) Land management road closeout. Maintenance of the water control features must continue until use of the road is discontinued and the road is put to bed by taking the following actions:
  - (i) Effective installation of water bars or other adequate road drainage structures at appropriate intervals, constructed to reasonably avoid surface water flowing over or under the water bar, and extending sufficient distance beyond the traveled way so that water does not reenter the road surface.
  - (ii) Water crossing structures must be appropriately sized or dismantled and removed in a manner that reasonably avoids sedimentation of the water body or tributary stream.
  - (iii) Any bridge or water crossing culvert in roads to be discontinued shall satisfy one of the following requirements:
    - 1. it shall be designed to provide an opening sufficient in size and structure to accommodate 25 year frequency water flows;
    - 2. it shall be designed to provide an opening with a cross-sectional area at least 3 1/2 times the cross-sectional area of the river, stream or tributary stream channel; or
    - 3. it shall be dismantled and removed in a fashion to reasonably avoid sedimentation of the river, stream or tributary stream.

If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

# (7) Slope Table

Filter strips, skid trail setbacks, and land management road setbacks must be maintained as specified in Section 15(O-1), but in no case shall be less than shown in the following table.

| Average slope of land between exposed mineral | Width of strip between exposed     |
|---|------------------------------------|
| soil and the shoreline (percent)              | mineral soil and shoreline         |
|   | (feet along surface of the ground) |
| 0   | <u>25</u>                          |
| 10  | 45                                 |
| 20  | 65                                 |
| 30  | 85                                 |
| 40  | 105                                |
| 50  | 125                                |

| 60 | 145 |
|----|-----|
| 70 | 165 |

# P. Clearing <u>or Removal</u> of Vegetation for <u>ActivitiesDevelopment</u> <u>Other Than Timber</u> <u>Harvesting</u>

(1) Within In a shoreland area zoned for Resource Protection District abutting a great pond, there shall be no cutting of vegetation within the strip of land extending 75 feet, horizontal distance, inland from the normal high-water line, except to remove safety hazards.

Elsewhere, in any Resource Protection District the <u>cutting or removal clearing</u> of vegetation shall be limited to that which is necessary for uses expressly authorized in that district.

- (2) Except in areas as described in Paragraph-Section P(1), above, and except to allow for the development of permitted uses, within a strip of land extending one-hundred (100) feet, horizontal distance, inland from the normal high-water line of a great pond classified GPA or a river flowing to a great pond classified GPA, and seventy-five (75) feet, horizontal distance, from any other water body, tributary stream, or the upland edge of a wetland, a buffer strip of vegetation shall be preserved as follows:
  - (a) There shall be no cleared opening greater than 250 square feet in the forest canopy (or other existing woody vegetation if a forested canopy is not present) as measured from the outer limits of the tree or shrub crown. However, a footpath not to exceed-ten\_six (106) feet in width as measured between tree trunks and/or shrub stems is permitted allowed provided that a cleared line of sight to the water through the buffer strip is not created. Adjacent to a great pond classified GPA, or stream or river flowing to a great pond classified GPA, the width of the foot path shall be limited to six (6) feet.
  - (b) Selective cutting of trees within the buffer strip is permitted allowed provided that a well-distributed stand of trees and other <u>natural</u> vegetation is maintained. For the purposes of this section 15(P)(2)(b) a "well-distributed stand of trees and other vegetation" adjacent to a great pond classified GPA or a river or stream flowing to a great pond classified GPA, shall be defined as maintaining a rating score of 1224 or more in eachany 25-foot by 2550-foot square rectangular (625–1250 square feet) area as determined by the following rating system.

| Diameter of Tree at 4-1/2 feet Above | Points   |
|--------------------------------------|----------|
| Ground Level (inches)                |          |
| 2 - <u>&lt;</u> 4 in.                | 1        |
| $\rightarrow$ 4 – <u>&lt;812</u> in. | 2        |
| $8 \rightarrow 12$ in.               | 4        |
| 12 in. or greater                    | <u>8</u> |

Adjacent to other water bodies, tributary streams, and wetlands, a "well-distributed stand of trees-and-other vegetation" is defined as maintaining a minimum rating score of <u>816</u> per 25-foot <u>by 50-foot rectangularsquare</u> area.

NOTE: As an example, adjacent to a great pond, if a 25-foot x 2550-foot plot contains three (3)-four (4) trees between 2 and 4 inches in diameter, two trees between 4 and 8 inches in diameter, three trees between 48 and 12 inches in diameter, and three-two trees over 12 inches in diameter, the rating score is:

$$(34x1)+(2x2)+(3x24)+(32x84)=2136$$
 points

Thus, the 25-foot by  $\frac{2550}{6}$ -foot plot contains trees worth  $\frac{2136}{2}$  points. Trees totaling  $\frac{912}{2}$  points ( $\frac{21-36}{2}$  =  $\frac{-912}{2}$ ) may be removed from the plot provided that no cleared openings are created.

The following shall govern in applying this point system:

- (i) The 25-foot by 50-foot rectangular plots must be established where the landowner or lessee proposes clearing within the required buffer;
- (ii) Each successive plot must be adjacent to, but not overlap a previous plot;
- (iii) Any plot not containing the required points must have no vegetation removed except as otherwise allowed by this Ordinance;
- (iv) Any plot containing the required points may have vegetation removed down to the minimum points required or as otherwise allowed by is Ordinance;
- (v) Where conditions permit, no more than 50% of the points on any 25-foot by 50-foot rectangular area may consist of trees greater than 12 inches in diameter.

For the purposes of Section 15(P)(2)(b) "other natural vegetation" is defined as retaining existing vegetation under three (3) feet in height and other ground cover and retaining at least five (5) saplings less than two (2) inches in diameter at four and one half (4 ½) feet above ground level for each 25-foot by 50-foot rectangle area. If five saplings do not exist, no woody stems less than two (2) inches in diameter can be removed until 5 saplings have been recruited into the plot.

NOTE: A municipality may elect to retain their present "point system" that is based on 25-foot by 25-foot plots. If so, the paragraph above must be modified as follows:

For the purposes of Section 15(P)(2)(b), "other natural vegetation" is defined as retaining existing vegetation under three (3) feet in height and other ground cover and retaining at least three (3) saplings less than two (2) inches in diameter at four and one-half (4 ½) feet above ground level for each 25-foot by 25-foot rectangular area. If three (3) saplings do not exist, no woody stems less than two (2) inches in diameter can be removed until 3 saplings have been recruited into the plot.

Subparagraph 15 (P)(2)(b) must also be modified to make it clear that the point system establishes only a "well-distributed stand of trees" not a well-distributed stand of trees and other vegetation. "Other vegetation" is described elsewhere.

Notwithstanding the above provisions, no more than 40% of the total volume of trees four (4) inches or more in diameter, measured at 4 1/2 feet above ground level may be removed in any ten (10) year period.

- (c) In order to protect water quality and wildlife habitat, adjacent to great ponds classified GPA, and streams and rivers which flow to great ponds classified GPA, existing vegetation under three (3) feet in height and other ground cover, including leaf litter and the forest duff layer, shall not be cut, covered, or removed, except to provide for a footpath or other permitted uses as described in Section 15(P) paragraphs (2) and (2)(a)-above.
- (d) Pruning of tree branches, on the bottom 1/3 of the tree is permitted allowed.
- (e) In order to maintain a buffer strip of vegetation, when the removal of storm-damaged, diseased, unsafe, or dead trees results in the creation of cleared openings, these openings shall be replanted with native tree species unless existing new tree growth is present.

The provisions contained in Section 15(P)(2) paragraph 2 above shall does not apply to those portions of public recreational facilities adjacent to public swimming areas as long as-Celeared areas, are however, shall be limited to the minimum area necessary.

(3) At distances greater than one hundred (100) feet, horizontal distance, from a great pond classified GPA or a river flowing to a great pond classified GPA, and seventy-five (75) feet, horizontal distance, from the normal high-water line of any other water body, tributary stream, or the upland edge of a wetland, except to allow for the development of permitted uses, there shall be permitted allowed on any lot, in any ten (10) year period, selective cutting of not more than forty (40) percent of the volume of trees four (4) inches or more in diameter, measured 4 1/2 feet above ground level. Tree removal in conjunction with the development of permitted uses shall be included in the forty (40) percent calculation. For the purposes of these standards volume may be considered to be equivalent to basal area.

In no event shall cleared openings for <u>any purposedevelopment</u>, including but not limited to, principal and accessory structures, driveways, <u>lawns</u> and sewage disposal areas, exceed in the aggregate, 25% of the lot area <u>within the shoreland zone</u> or ten thousand (10,000) square feet, whichever is greater, including land previously <u>cleareddeveloped</u>, This provision shall not apply to the General Development or Commercial Fisheries/Maritime Activities Districts.

- (4) <u>Legally existing nonconforming c</u>Cleared openings <u>legally in existence on the effective date</u> of this Ordinance-may be maintained, but shall not be enlarged, except as <u>permitted allowed</u> by this Ordinance.
- (5) Fields <u>and other cleared openings</u> which have reverted to primarily shrubs, trees, or other woody vegetation shall be regulated under the provisions of this sSection 15(P).

# Q. Erosion and Sedimentation Control

- (1) All activities which involve filling, grading, excavation or other similar activities which result in unstabilized soil conditions and which require a permit shall <u>also</u> require a written soil erosion and sedimentation control plan. The plan shall be submitted to the permitting authority for approval and shall include, where applicable, provisions for:
  - (a) Mulching and revegetation of disturbed soil.

- (b) Temporary runoff control features such as <u>h</u>bay bales, silt fencing or diversion ditches.
- (c) Permanent stabilization structures such as retaining walls or rip\_rap.
- (2) In order to create the least potential for erosion, development shall be designed to fit with the topography and soils of the site. Areas of steep slopes where high cuts and fills may be required shall be avoided wherever possible, and natural contours shall be followed as closely as possible.
- (3) Erosion and sedimentation control measures shall apply to all aspects of the proposed project involving land disturbance, and shall be in operation during all stages of the activity. The amount of exposed soil at every phase of construction shall be minimized to reduce the potential for erosion.
- (4) Any exposed ground area shall be temporarily or permanently stabilized within one (1) week from the time it was last actively worked, by use of riprap, sod, seed, and mulch, or other effective measures. In all cases permanent stabilization shall occur within nine (9) months of the initial date of exposure. In addition:
  - (a) Where mulch is used, it shall be applied at a rate of at least one (1) bale per five hundred (500) square feet and shall be maintained until a catch of vegetation is established.
  - (b) Anchoring the mulch with netting, peg and twine or other suitable method may be required to maintain the mulch cover.
  - (c) Additional measures shall be taken where necessary in order to avoid siltation into the water. Such measures may include the use of staked hay bales and/or silt fences.
- (5) Natural and man-made drainage ways and drainage outlets shall be protected from erosion from water flowing through them. Drainageways shall be designed and constructed in order to carry water from a twenty five (25) year storm or greater, and shall be stabilized with vegetation or lined with rip-rap.
- **R. Soils.** All land uses shall be located on soils in or upon which the proposed uses or structures can be established or maintained without causing adverse environmental impacts, including severe erosion, mass soil movement, improper drainage, and water pollution, whether during or after construction. Proposed uses requiring subsurface waste disposal, and commercial or industrial development and other similar intensive land uses, shall require a soils report based on an on-site investigation and be prepared by state-certified professionals. Certified persons may include Maine Certified Soil Scientists, Maine Registered Professional Engineers, Maine State Certified Geologists and other persons who have training and experience in the recognition and evaluation of soil properties. The report shall be based upon the analysis of the characteristics of the soil and surrounding land and water areas, maximum ground water elevation, presence of ledge, drainage conditions, and other pertinent data which the evaluator deems appropriate. The soils report shall include recommendations for a proposed use to counteract soil limitations where they exist.
- **S.** Water Quality. No activity shall deposit on or into the ground or discharge to the waters of the State any pollutant that, by itself or in combination with other activities or substances, will impair designated uses or the water classification of the water body, tributary stream or wetland.

**T.** Archaeological Site. Any proposed land use activity involving structural development or soil disturbance on or adjacent to sites listed on, or eligible to be listed on the National Register of Historic Places, as determined by the permitting authority, shall be submitted by the applicant to the Maine Historic Preservation Commission for review and comment, at least twenty (20) days prior to action being taken by the permitting authority. The permitting authority shall consider comments received from the Commission prior to rendering a decision on the application.

NOTE: Municipal officials should contact the Maine Historic Preservation Commission for the listing and location of Historic Places in their community.

#### 16. Administration

# A. Administering Bodies and Agents

- (1) Code Enforcement Officer. A Code Enforcement Officer shall be appointed or reappointed annually by July 1st.
- (2) Board of Appeals. A Board of Appeals shall be created in accordance with the provisions of Title-30-A M.R.S.A. Section 2691.
- (3) Planning Board. A Planning Board shall be created in accordance with the provisions of State law.
- **B. Permits Required.** After the effective date of this Ordinance no person shall, without first obtaining a permit, engage in any activity or use of land or structure requiring a permit in the district in which such activity or use would occur; or expand, change, or replace an existing use or structure; or renew a discontinued nonconforming use. A person who is issued a permit pursuant to this Ordinance shall have a copy of the permit on site while the work authorized by the permit is performed.
  - (1) A permit is not required for the replacement of an existing road culvert as long as:
    - (a4) The replacement culvert is not more than 25% longer than the culvert being replaced;
    - (b2) The replacement culvert is not longer than 75 feet; and
    - (c3)Adequate erosion control measures are taken to prevent sedimentation of the water, and the crossing does not block fish passage in the water-course.
  - (2) A permit is not required for an archaeological excavation as long as the excavation is conducted by an archaeologist listed on the State Historic Preservation Officer's level 1 or level 2 approved list, and unreasonable erosion and sedimentation is prevented by means of adequate and timely temporary and permanent stabilization measures.
  - (3) Any permit required by this Ordinance shall be in addition to any other permit required by other law or ordinance.

# C. Permit Application

- (1) Every applicant for a permit shall submit a written application, including a scaled site plan, on a form provided by the municipality, to the appropriate official as indicated in Section 14.
- (2) All applications shall be signed by the an owner or individual who can show evidence of right, title or interest in the owners of the property or other person by an agent, representative, tenant, or contractor of the owner with authorization from the owner to apply for a permit hereunder, authorizing the work, certifying that the information in the application is complete and correct. If the person signing the application is not the owner or lessee of the property then that person shall submit a letter of authorization from the owner or lessee.
- (3) All applications shall be dated, and the Code Enforcement Officer or Planning Board, as appropriate, shall note upon each application the date and time of its receipt.
- (4) If the property is not served by a public sewer, a valid plumbing permit or a completed application for a plumbing permit, including the site evaluation approved by the Plumbing Inspector, shall be submitted whenever the nature of the proposed structure or use would require the installation of a subsurface sewage disposal system.
- **D. Procedure for Administering Permits.** Within 35 days of the date of receiving <u>a</u> written application, the Planning <u>B</u>board or Code Enforcement Officer, as indicated in Section 14, shall notify the applicant in writing either that the application is a complete application, or, if the application is incomplete, that specified additional material is needed to make the application complete. The Planning Board or the Code Enforcement Officer, as appropriate, shall approve, approve with conditions, or deny all permit applications in writing within 35 days of receiving a completed application. However, if the Planning <u>bB</u>oard has a waiting list of applications, a decision on the application shall occur within 35 days after the first available date on the Planning Board's agenda following receipt of the completed application, or within 35 days of the public hearing, if the proposed use or structure is found to be in conformance with the purposes and provisions of this Ordinance.

The applicant shall have the burden of proving that the proposed land use activity is in conformity with the purposes and provisions of this Ordinance.

After the submission of a complete application to the Planning Board, the Board shall approve an application or approve it with conditions if it makes a positive finding based on the information presented that the proposed use:

- (1) Will maintain safe and healthful conditions;
- (2) Will not result in water pollution, erosion, or sedimentation to surface waters;
- (3) Will adequately provide for the disposal of all wastewater;
- (4) Will not have an adverse impact on spawning grounds, fish, aquatic life, bird or other wildlife habitat:

- (5) Will conserve shore cover and visual, as well as actual, points of access to inland and coastal waters:
- (6) Will protect archaeological and historic resources as designated in the comprehensive plan;
- (7) Will not adversely affect existing commercial fishing or maritime activities in a Commercial Fisheries/Maritime Activities district;
- (8) Will avoid problems associated with flood-plain development and use; and
- (9) Is in conformance with the provisions of Section 15, Land Use Standards.

If a permit is either denied or approved with conditions, the reasons as well as conditions shall be stated in writing. No approval shall be granted for an application involving a structure if the structure would be located in an unapproved subdivision or would violate any other local ordinance, or regulation or statute administered or any State law by the municipality.

- **E. Special Exceptions.** In addition to the criteria specified in Section 16-(D)- above, excepting structure setback requirements, the Planning Board may approve a permit for a single family residential structure in a Resource Protection District provided that the applicant demonstrates that all of the following conditions are met:
  - (1) There is no location on the property, other than a location within the Resource Protection District, where the structure can be built.
  - (2) The lot on which the structure is proposed is undeveloped and was established and recorded in the registry of deeds of the county in which the lot is located before the adoption of the Resource Protection District.
  - (3) The proposed location of aAll proposed buildings, sewage disposal systems and other improvements are:
    - (a) Located on natural ground slopes of less than 20%; and
    - (b) Located outside the floodway of the 100-year flood\_plain along rivers and artificially formed great ponds along rivers and outside the velocity zone in areas subject to tides, based on detailed flood insurance studies and as delineated on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps; all buildings, including basements, are elevated at least one foot above the 100-year flood\_plain elevation; and the development is otherwise in compliance with any applicable municipal flood\_plain ordinance.

If the floodway is not shown on the Federal Emergency Management Agency Maps, it is deemed to be 1/2 the width of the 100-year flood-plain.

(4) The total ground-floor area, including cantilevered or similar overhanging extensions, of all principal and accessory structures is limited to a maximum of 1,500 square feet. This limitation shall not be altered by variance.

- (5) All structures, except functionally water-dependent structures, are set back from the normal high-water line of a water body, tributary stream or upland edge of a wetland to the greatest practical extent, but not less than 75 feet, horizontal distance. In determining the greatest practical extent, the pPlanning bBoard shall consider the depth of the lot, the slope of the land, the potential for soil erosion, the type and amount of vegetation to be removed, the proposed building site's elevation in regard to the flood\_plain, and its proximity to moderate-value and high-value wetlands.
- **F. Expiration of Permit.** Following the issuance of a permit, if Permits shall expire one year from the date of issuance if ano substantial start is not made in construction or in the use of the property within during that one year of the date of the permit, the permit shall lapse and become voidperiod. If a substantial start is made within one year of the issuance of the permit, the applicant shall have one additional year to complete the project, at which time the permit shall expire.
- **G.** Installation of Public Utility Service. A public utility, water district, sanitary district or any utility company of any kind may not install services to any new structure located in the shoreland zone unless written authorization attesting to the validity and currency of all local permits required under this or any previous Ordinance, has been issued by the appropriate municipal officials or other written arrangements have been made between the municipal officials and the utility.

# H. Appeals

- (1) Powers and Duties of the Board of Appeals. The Board of Appeals shall have the following powers:
  - (a) Administrative Appeals: To hear and decide <u>administrative</u> appeals, on an <u>appellate basis</u>, where it is alleged <u>by an aggrieved party</u> that there is an error in any order, requirement, decision, or determination made by, or failure to act by, the <u>Code Enforcement Officer or</u> Planning Board in the administration of this Ordinance; and to hear and decide administrative appeals on a de novo basis where it is alleged by an aggrieved party that there is an error in any order, requirement, decision or determination made by, or failure to act by, the <u>Code Enforcement Officer in his or her review of and action on a permit application under this Ordinance</u>. Any order, requirement, decision or determination made, or failure to act, in the enforcement of this ordinance is not appealable to the Board of Appeals.

NOTE: Whether an administrative appeal is decided on an "appellate" basis or on a "de novo" basis, or whether an enforcement decision is appealable to the board of appeals, shall be the decision of the municipality through its specific ordinance language. The Department is not mandating one alternative over the other. If a municipality chooses appeals procedures different from those in Section 16(H), it is recommended that assistance be sought from legal counsel to ensure that the adopted language is legally sound.

(b) Variance Appeals: To authorize variances upon appeal, within the limitations set forth in this Ordinance.

- (2) Variance Appeals. Variances may be permitted granted only under the following conditions:
  - (a) Variances may be granted only from dimensional requirements including, but not limited to, lot width, structure height, percent of lot coverage, and setback requirements.
  - (b) Variances shall not be granted for establishment of any uses otherwise prohibited by this Ordinance.
  - (c) The Board shall not grant a variance unless it finds that:
    - (i) The proposed structure or use would meet the provisions of Section 15 except for the specific provision which has created the non-conformity and from which relief is sought; and
    - (ii) The strict application of the terms of this Ordinance would result in undue hardship. The term "undue hardship" shall mean:
      - a. That the land in question cannot yield a reasonable return unless a variance is granted;
      - b. That the need for a variance is due to the unique circumstances of the property and not to the general conditions in the neighborhood;
      - c. That the granting of a variance will not alter the essential character of the locality; and
      - d. That the hardship is not the result of action taken by the applicant or a prior owner.
  - (d) Notwithstanding Section 16(H)(2)(c)(ii) above,
  - (d) The Board of Appeals may grant a variance to an property owner of a residential dwelling for the purpose of making that dwellingproperty accessible to a person with a disability who resides in or regularly uses the dwellingis living on the property. The board shall restrict any variance granted under this subsection solely to the installation of equipment or the construction of structures necessary for access to or egress from the dwellingproperty by the person with the disability. The board may impose conditions on the variance, including limiting the variance to the duration of the disability or to the time that the person with the disability lives ion the dwellingproperty. The term "structures necessary for access to or egress from the dwellingproperty" shall include railing, wall or roof systems necessary for the safety or effectiveness of the structure.
  - (e) <u>T</u>the Board of Appeals shall limit any variances granted as strictly as possible in order to <u>e</u>insure conformance with the purposes and provisions of this Ordinance to the greatest extent possible, and in doing so may impose such conditions to a variance as it deems necessary. The party receiving the variance shall comply with any conditions imposed.
  - (f) A copy of all variances granted by the Board of Appeals shall be submitted to the Department of Environmental Protection within fourteen (14) days of the decision.

(f) A copy of each variance request, including the application and all supporting information supplied by the applicant, shall be forwarded by the municipal officials to the Commissioner of the Department of Environmental Protection at least twenty (20) days prior to action by the Board of Appeals. Any comments received from the Commissioner prior to the action by the Board of Appeals shall be made part of the record and shall be taken into consideration by the Board of Appeals.

# (3) Administrative Appeals

When the Board of Appeals reviews a decision of the Code Enforcement Officer the Board of Appeals shall hold a "de novo" hearing. At this time the Board may receive and consider new evidence and testimony, be it oral or written. When acting in a "de novo" capacity the Board of Appeals shall hear and decide the matter afresh, undertaking its own independent analysis of evidence and the law, and reaching its own decision.

When the Board of Appeals hears a decision of the Planning Board, it shall hold an appellate hearing, and may reverse the decision of the Planning Board only upon finding that the decision was contrary to specific provisions of the Ordinance or contrary to the facts presented to the Planning Board. The Board of Appeals may only review the record of the proceedings before the Planning Board. The Board Appeals shall not receive or consider any evidence which was not presented to the Planning Board, but the Board of Appeals may receive and consider written or oral arguments. If the Board of Appeals determines that the record of the Planning Board proceedings are inadequate, the Board of Appeals may remand the matter to the Planning Board for additional fact finding.

# (34) Appeal Procedure

- (a) Making an Appeal
  - (i) An administrative or variance appeal may be taken to the Board of Appeals by an aggrieved party from any decision of the Code Enforcement Officer or the Planning Board, except for enforcement-related matters as described in Section 16(H)(1)(a) above. Such an appeal shall be taken within thirty (30) days of the date of the official, written decision appealed from, and not otherwise, except that the Board, upon a showing of good cause, may waive the thirty (30) day requirement.
  - (ii) <u>Such appeal Applications for appeals</u> shall be made by filing with the Board of Appeals a written notice of appeal which includes:
    - a. A concise written statement indicating what relief is requested and why it the appeal or variance should be granted.
    - b. A sketch drawn to scale showing lot lines, location of existing buildings and structures and other physical features of the lot pertinent to the relief sought.
  - (iii) Upon being notified of receiving an application for an administrative appeal or a variance, the Code Enforcement Officer or Planning Board, as appropriate, shall

- transmit to the Board of Appeals all of the papers constituting the record of the decision appealed from.
- (iv) The Board of Appeals shall hold a public hearing on the an administrative appeal or a request for a variance within thirty-five (35) days of its receipt of a an appeal request complete written application, unless this time period is extended by the parties.
- (b) Decision by Board of Appeals
  - (i) A majority of the <u>full voting membership of the bBoard</u> shall constitute a quorum for the purpose of deciding an appeal. A member who abstains shall not be counted in determining whether a quorum exists.
  - (ii) The concurring vote of a majority of the members of the Board of Appeals present and voting shall be necessary to reverse an order, requirement, decision, or determination of the Code Enforcement Officer or Planning Board, or to decide in favor of the applicant on any matter on which it is required to decide under this Ordinance, or to affect any variation in the application of this Ordinance from its stated terms. The board may reverse the decision, or failure to act, of the Code Enforcement Officer or Planning Board only upon findin that the decision, or failure to act, was clearly contrary to specific provisions of this Ordinance.
  - (iii) The person filing the appeal shall have the burden of proof.
  - (iviii) The Board shall decide all <u>administrative</u> appeals <u>and variance appeals</u> within thirty five (35) days after the close of the hearing, and shall issue a written decision on all appeals.
  - (iv) The Board of Appeals shall state the reasons and basis for its decision, including a statement of the facts found and conclusions reached by the Board. The Board shall cause written notice of its decision to be mailed or hand-delivered to the applicant and to the Department of Environmental Protection within seven (7) days of the Board's decision. Copies of written decisions of the Board of Appeals shall be given to the Planning Board, Code Enforcement Officer, and the municipal officers. All decisions shall become a part of the record and shall include a statement of findings and conclusions as well as the reasons or basis therefor, and the appropriate order, relief or denial thereof.
- (45) Appeal to Superior Court. Except as provided by 30-A M.R.S.A. section 2691(3)(F), aAny aggrieved party who participated as a party during the proceedings before the Board of Appeals may take an appeal to Superior Court in accordance with State laws within forty-five (45) days from the date of any decision of the Board of Appeals.
- (56) Reconsideration. <u>In accordance with 30-A M.R.S.A.</u> section 2691(3)(F), tThe Board of Appeals may reconsider any decision within <u>forty-five (45)</u> thirty (30) days of its prior decision. A request to the Board to reconsider a decision must be filed within ten (10) days of the decision that is being reconsidered. A vote to reconsider and the action taken on that reconsideration must occur and be completed within forty-five (45) days of the date of the vote on the original decision. Reconsideration of a decision shall require a positive vote of the

majority of the Board members originally voting on the decision, and proper notification to the landowner, petitioner, planning board, code enforcement officer, and other parties of interest, including abuttors and those who testified at the original hearing(s). The Board may conduct additional hearings and receive additional evidence and testimony.

Appeal of a reconsidered decision to Superior Court must be made within fifteen (15) days after the decision on reconsideration.

#### I. Enforcement

- (1) Nuisances. Any violation of this Ordinance shall be deemed to be a nuisance.
- (2) Code Enforcement Officer
  - (a) It shall be the duty of the Code Enforcement Officer to enforce the provisions of this Ordinance. If the Code Enforcement Officer shall find that any provision of this Ordinance is being violated, he or she shall notify in writing the person responsible for such violation, indicating the nature of the violation and ordering the action necessary to correct it, including discontinuance of illegal use of land, buildings or structures, or work being done, removal of illegal buildings or structures, and abatement of nuisance conditions. A copy of such notices shall be submitted to the municipal officers and be maintained as a permanent record.
  - (b) The Code Enforcement Officer shall conduct on-site inspections to insure compliance with all applicable laws and conditions attached to permit approvals. The Code Enforcement Officer shall also investigate all complaints of alleged violations of this Ordinance.
  - (c) The Code Enforcement Officer shall keep a complete record of all essential transactions of the office, including applications submitted, permits granted or denied, variances granted or denied, revocation actions, revocation of permits, appeals, court actions, violations investigated, violations found, and fees collected. On a biennial basis, a summary of this record shall be submitted to the Director of the Bureau of Land and Water Quality-Control within the Department of Environmental Protection.
- (3) Legal Actions. When the above action does not result in the correction or abatement of the violation or nuisance condition, the Municipal Officers, upon notice from the Code Enforcement Officer, are hereby directed to institute any and all actions and proceedings, either legal or equitable, including seeking injunctions of violations and the imposition of fines, that may be appropriate or necessary to enforce the provisions of this Ordinance in the name of the municipality. The municipal officers, or their authorized agent, are hereby authorized to enter into administrative consent agreements for the purpose of eliminating violations of this Ordinance and recovering fines without Court action. Such agreements shall not allow an illegal structure or use to continue unless there is clear and convincing evidence that the illegal structure or use was constructed or conducted as a direct result of erroneous advice given by an authorized municipal official and there is no evidence that the owner acted in bad faith, or unless the removal of the structure or use will result in a threat or hazard to public health and safety or will result in substantial environmental damage.

(4) Fines. Any person, including but not limited to a landowner, a landowner's agent or a contractor, who orders or conducts violates any provision or requirement activity in violation of this Ordinance shall be penalized in accordance with Title-30-A, M.R.S.A. Maine Revised Statutes Annotated, Sub section 4452.

NOTE: Current penalties include fines of not less than \$100 nor more than \$2500 per violation for each day that the violation continues. However, in a resource protection district the maximum penalty is increased to \$5000 (38 M.R.S.A. section 4452).

#### 17. Definitions.

Accessory structure or use - a use or structure which is incidental and subordinate to the principal use or structure. Accessory uses, when aggregated, shall not subordinate the principal use of the lot. A deck or similar extension of the principal structure or a garage attached to the principal structure by a roof or a common wall is considered part of the principal structure.

Agriculture—the production, keeping or maintenance for sale or lease, of plants and/or animals, including but not limited to: forages and sod crops; grains and seed crops; dairy animals and dairy products; poultry and poultry products; livestock; fruits and vegetables; and ornamental and green house products. Agriculture does not include forest management and timber harvesting activities.

Aggrieved party - an owner of land whose property is directly or indirectly affected by the granting or denial of a permit or variance under this Ordinance; a person whose land abuts land for which a permit or variance has been granted; or any other person or group of persons who have suffered particularized injury as a result of the granting or denial of such permit or variance.

Agriculture - the production, keeping or maintenance for sale or lease, of plants and/or animals, including but not limited to: forages and sod crops; grains and seed crops; dairy animals and dairy products; poultry and poultry products; livestock; fruits and vegetables; and ornamental and greenhouse products. Agriculture does not include forest management and timber harvesting activities.

Aquaculture - the growing or propagation of harvestable freshwater, estuarine, or marine plant or animal species.

Basal Area - the area of cross-section of a tree stem at 4 1/2 feet above ground level and inclusive of bark.

Basement - any portion of a structure with a floor-to-ceiling height of 6 feet or more and having more than 50% of its volume below the existing ground level.

Boat Launching Facility - a facility designed primarily for the launching and landing of watercraft, and which may include an access ramp, docking area, and parking spaces for vehicles and trailers.

# Bureau - State of Maine Department of Conservation's Bureau of Forestry

Campground - any area or tract of land to accommodate two (2) or more parties in temporary living quarters, including, but not limited to tents, recreational vehicles or other shelters.

Canopy – the more or less continuous cover formed by tree crowns in a wooded area.

Coastal wetland - all tidal and subtidal lands; all lands below any identifiable debris line left by tidal action; all lands with vegetation present that is tolerant of salt water and occurs primarily in a salt water or estuarine habitat; and any swamp, marsh, bog, beach, flat or other contiguous low land that which is subject to tidal action during the maximum springhighest tide level for the year in which an activity is proposed as identified in tide tables published by the National Ocean Service. Coastal wetlands may include portions of coastal sand dunes.

NOTE: All areas below the maximum spring tide level are coastal wetlands. These areas may consist of rocky ledges, sand and cobble beaches, mud flats, etc., in addition to salt marshes and salt meadows.

Commercial use - the use of lands, buildings, or structures, other than a "home occupation," defined below, the intent and result of which activity is the production of income from the buying and selling of goods and/or services, exclusive of rental of residential buildings and/or dwelling units.

Cross-sectional area – the cross-sectional area of a stream or tributary stream channel is determined by multiplying the stream or tributary stream channel width by the average stream or tributary stream channel depth. The stream or tributary stream channel width is the straight line distance from the normal high-water line on one side of the channel to the normal high-water line on the opposite side of the channel. The average stream or tributary stream channel depth is the average of the vertical distances from a straight line between the normal high-water lines of the stream or tributary stream channel to the bottom of the channel.

DBH – the diameter of a standing tree measured 4.5 feet from ground level.

Development – a change in land use involving alteration of the land, water or vegetation, or the addition or alteration of structures or other construction not naturally occurring.

Dimensional requirements - numerical standards relating to spatial relationships including but not limited to setback, lot area, shore frontage and height.

Disability - any disability, infirmity, malformation, disfigurement, congenital defect or mental condition caused by bodily injury, accident, disease, birth defect, environmental conditions or illness; and also includes the physical or mental condition of a person which constitutes a substantial handicap as determined by a physician or in the case of mental handicap, by a psychiatrist or psychologist, as well as any other health or sensory impairment which requires special education, vocational rehabilitation or related services.

Disruption of shoreline integrity - the alteration of the physical shape, properties, or condition of a shoreline at any location by timber harvesting and related activities. A shoreline where shoreline integrity has been disrupted is recognized by compacted, scarified and/or rutted soil, an abnormal channel or shoreline cross-section, and in the case of flowing waters, a profile and character altered from natural conditions.

Driveway - a vehicular access-way less than five hundred (500) feet in length serving two-lots or less single-family dwellings or one two-family dwelling, or less.

Emergency operations - operations conducted for the public health, safety or general welfare, such as protection of resources from immediate destruction or loss, law enforcement, and operations to rescue human beings, property and livestock from the threat of destruction or injury.

Essential services - gas, electrical or communication facilities; steam, fuel, electric power or water transmission or distribution lines, towers and related equipment; telephone cables or lines, poles and related equipment; gas, oil, water, slurry or other similar pipelines; municipal sewage lines, collection or supply systems; and associated storage tanks. Such systems may include towers, poles, wires, mains, drains, pipes, conduits, cables, fire alarms and police call boxes, traffic signals, hydrants and similar accessories, but shall not include service drops or buildings which are necessary for the furnishing of such services.

Expansion of a structure - an increase in the floor area or volume of a structure, including all extensions such as, but not limited to: attached decks, garages, porches and greenhouses.

Expansion of use - the addition of one or more months to a use's operating season; or the use of more floor area or ground area devoted to a particular use.

Family - one or more persons occupying a premises and living as a single housekeeping unit.

Floodway - the channel of a river or other watercourse and adjacent land areas that must be reserved in order to discharge the 100-year flood without cumulatively increasing the water surface elevation by more than one foot in height.

Floor area - the sum of the horizontal areas of the floor(s) of a structure enclosed by exterior walls, plus the horizontal area of any unenclosed portions of a structure such as porches and decks.

Forest management activities - timber cruising and other forest resource evaluation activities, pesticide or fertilizer application, management planning activities, timber stand improvement, pruning, regeneration of forest stands, and other similar or associated activities, exclusive of timber harvesting and the construction, creation or maintenance of roads.

Forested wetland - a freshwater wetland dominated by woody vegetation that is six (6) meters tall (approximately twenty (20) feet) or taller.

Forest Stand - a contiguous group of trees sufficiently uniform in age class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable unit.

Foundation - the supporting substructure of a building or other structure, excluding wooden sills and post supports, including but not limited to-including basements, slabs, sills, posts or frostwalls, or other base consisting of concrete, block, brick or similar material.

Freshwater wetland - freshwater swamps, marshes, bogs and similar areas, other than forested wetlands, which are:

1. Of ten or more contiguous acres; or of less than 10 contiguous acres and adjacent to a surface water body, excluding any river, stream or brook, such that in a natural state, the combined surface area is in excess of 10 acres; and

2. Inundated or saturated by surface or ground water at a frequency and for a duration sufficient to support, and which under normal circumstances do support, a prevalence of wetland vegetation typically adapted for life in saturated soils.

Freshwater wetlands may contain small stream channels or inclusions of land that do not conform to the criteria of this definition.

Functionally water-dependent uses - those uses that require, for their primary purpose, location on submerged lands or that require direct access to, or location in, coastal or inland waters and that can not be located away from these waters. The uses include, but are not limited to commercial and recreational fishing and boating facilities, excluding recreational boat storage buildings, finfish and shellfish processing, fish storage and retail and wholesale fish marketing facilities, waterfront dock and port facilities, shipyards and boat building facilities, marinas, navigation aids, basins and channels, retaining walls, industrial uses dependent upon water-borne transportation or requiring large volumes of cooling or processing water that can not reasonably be located or operated at an inland site, and uses that primarily provide general public access to coastal or inland waters.

Great pond - any inland body of water which in a natural state has a surface area in excess of ten acres, and any inland body of water artificially formed or increased which has a surface area in excess of thirty (30) acres except for the purposes of this Ordinance, where the artificially formed or increased inland body of water is completely surrounded by land held by a single owner,

Great pond classified GPA - any great pond classified GPA, pursuant to <u>Title-38 M.R.S.A.</u> Article 4-A Section 465-A. This classification includes some, but not all impoundments of rivers that are defined as great ponds.

Ground cover – small plants, fallen leaves, needles and twigs, and the partially decayed organic matter of the forest floor.

Harvest Area - the area where timber harvesting and related activities, including the cutting of trees, skidding, yarding, and associated road construction take place. The area affected by a harvest encompasses the area within the outer boundaries of these activities, excepting unharvested areas greater than 10 acres within the area affected by a harvest.

Height of a structure - the vertical distance between the mean original (<u>prior to construction</u>) grade at the downhill side of the structure and the highest point of the structure, excluding chimneys, steeples, antennas, and similar appurtenances <del>which that</del> have no floor area.

Home occupation - an occupation or profession which is customarily conducted on or in a residential structure or property and which is 1) clearly incidental to and compatible with the residential use of the property and surrounding residential uses; and 2) which employs no more than two (2) persons other than family members residing in the home.

Increase in nonconformity of a structure - any change in a structure or property which causes further deviation from the dimensional standard(s) creating the nonconformity such as, but not limited to, reduction in water body, tributary stream or wetland setback distance, increase in lot coverage, or increase in height of a structure. Property changes or structure expansions which either meet the dimensional standard or which cause no further increase in the linear extent of nonconformance of the existing structure shall not be considered to increase nonconformity. For example, there is no

increase in nonconformity with the setback requirement for water bodies, wetlands, or tributary streams if the expansion extends no further into the required setback area than does any portion of the existing nonconforming structure. Hence, a structure may be expanded laterally provided that the expansion extends no closer to the water body, tributary stream, or wetland than the closest portion of the existing structure from that water body, tributary stream, or wetland. Included in this allowance are expansions which in-fill irregularly shaped structures.

Individual private campsite - an area of land which is not associated with a campground, but which is developed for repeated camping by only one group not to exceed ten (10) individuals and which involves site improvements which may include but not be limited to <u>a gravel pads</u>, parking areas, fire places, or tent platforms.

Industrial - The assembling, fabrication, finishing, manufacturing, packaging or processing of goods, or the extraction of minerals.

<u>Institutional – a non-profit or quasi-public use, or institution such as a church, library, public or private school, hospital, or municipally owned or operated building, structure or land used for public purposes.</u>

Land Management Road - a route or track consisting of a bed of exposed mineral soil, gravel, or other surfacing materials constructed for, or created by, the passage of motorized vehicles and used primarily for timber harvesting and related activities, including associated log yards, but not including skid trails or skid roads.

Licensed Forester - a forester licensed under 32 M.R.S.A. Chapter 76.

Lot area - The area of land enclosed within the boundary lines of a lot, minus land below the normal high-water line of a water body or upland edge of a wetland and areas beneath roads serving more than two lots.

Marina - a business establishment having frontage on navigable water and, as its principal use, providing for hire offshore moorings or docking facilities for boats, and which may also provide accessory services such as boat and related sales, boat repair and construction, indoor and outdoor storage of boats and marine equipment, <u>baitboat</u> and tackle shops and marine fuel service facilities.

Market value - the estimated price a property will bring in the open market and under prevailing market conditions in a sale between a willing seller and a willing buyer, both conversant with the property and with prevailing general price levels.

Mineral exploration - hand sampling, test boring, or other methods of determining the nature or extent of mineral resources which create minimal disturbance to the land and which include reasonable measures to restore the land to its original condition.

Mineral extraction - any operation within any twelve (12) month period which removes more than one hundred (100) cubic yards of soil, topsoil, loam, sand, gravel, clay, rock, peat, or other like material from its natural location and to transport the product removed, away from the extraction site.

Minimum lot width - the closest distance between the side lot lines of a lot. When only two lot lines extend into the shoreland zone, both lot lines shall be considered to be side lot lines.

Multi-unit residential - a residential structure containing three (3) or more residential dwelling units.

Native – indigenous to the local forests.

Non-conforming condition – non-conforming lot, structure or use which is allowed solely because it was in lawful existence at the time this Ordinance or subsequent amendment took effect.

Non-conforming lot - a single lot of record which, at the effective date of adoption or amendment of this Ordinance, does not meet the area, frontage, or width requirements of the district in which it is located.

Non-conforming structure - a structure which does not meet any one or more of the following dimensional requirements; setback, height, or lot coverage, but which is allowed solely because it was in lawful existence at the time this Ordinance or subsequent amendments took effect.

Non-conforming use - use of buildings, structures, premises, land or parts thereof which is not <u>allowedpermitted</u> in the district in which it is situated, but which is allowed to remain solely because it was in lawful existence at the time this Ordinance or subsequent amendments took effect.

Normal high-water line (non-tidal waters) - that line which is apparent from visible markings, changes in the character of soils due to prolonged action of the water or changes in vegetation, and which distinguishes between predominantly aquatic and predominantly terrestrial land. Areas contiguous with rivers and great ponds that support non-forested wetland vegetation and hydric soils and that are at the same or lower elevation as the water level of the river or great pond during the period of normal high-water are considered part of the river or great pond. In the case of wetlands adjacent to rivers and great ponds, the normal high water line is the upland edge of the wetland, and not the edge of the open water.

NOTE: Adjacent to tidal waters, setbacks are measured from the upland edge of the "coastal wetland."

Person - an individual, corporation, governmental agency, municipality, trust, estate, partnership, association, two or more individuals having a joint or common interest, or other legal entity.

Piers, docks, wharves, bridges and other structures and uses extending over or beyond the normal high-water line or within a wetland.

Temporary: Structures which remain in or over the water for less than seven (7) months in

any period of twelve (12) consecutive months.

Permanent: Structures which remain in or over the water for seven (7) months or more in any

period of twelve (12) consecutive months.

Principal structure - a building other than one which is used for purposes wholly incidental or accessory to the use of another building or use on the same premises.

Principal use - a use other than one which is wholly incidental or accessory to another use on the same premises.

Public, facility - any facility, including, but not limited to, buildings, property, recreation areas, and roads, which are owned, leased, or otherwise operated, or funded by a governmental body or public entity.

Recent flood-plain soils - the following soil series as described and identified by the National Cooperative Soil Survey:

| Ha <u>d</u> ley | Limerick          |
|-----------------|-------------------|
| Medomak         | Ondawa            |
| Cornish         | Charles           |
| Rumney          | Saco              |
| Sunday          | Winooski          |
|                 | Cornish<br>Rumney |

Recreational facility - a place designed and equipped for the conduct of sports, leisure time activities, and other customary and usual recreational activities, excluding boat launching facilities.

Recreational vehicle - a vehicle or an attachment to a vehicle designed to be towed, and designed for temporary sleeping or living quarters for one or more persons, and which may include a pick-up camper, travel trailer, tent trailer, camp trailer, and motor home. In order to be considered as a vehicle and not as a structure, the unit must remain with its tires on the ground, and must be registered with the State Division of Motor Vehicles.

Replacement system - a system intended to replace: 1.) an existing system which is either malfunctioning or being upgraded with no significant change of design flow or use of the structure, or 2.) any existing overboard wastewater discharge.

Residual basal area - the sum of the basal area of trees remaining on a harvested site.

Residential dwelling unit - a room or group of rooms designed and equipped exclusively for use as permanent, seasonal, or temporary living quarters for only one family at a time, and containing cooking, sleeping and toilet facilities. The term shall include mobile homes, and rental units that contain cooking, sleeping, and toilet facilities regardless of the time-period rented. but not #Recreational vehicles are not residential dwelling units.

Residual basal area - the average of the basal area of trees remaining on a harvested site.

Riprap - rocks, irregularly shaped, and at least six (6) inches in diameter, used for erosion control and soil stabilization, typically used on ground slopes of two (2) units horizontal to one (1) unit vertical or less.

Residual Stand - a stand of trees remaining in the forest following timber harvesting and related activities

River - a free-flowing body of water including its associated flood-plain wetlands from that point at which it provides drainage for a watershed of twenty five (25) square miles to its mouth.

# NOTE: The portion of a river that is subject to tidal action is a coastal wetland.

Road - a route or track consisting of a bed of exposed mineral soil, gravel, asphalt, or other surfacing material constructed for or created by the repeated passage of motorized vehicles, excluding a driveway as defined.

Salt marsh - Areas <u>ofalong</u> coastal <u>wetlandwaters</u> (most often along coastal bays) <u>which that</u> support salt tolerant species, and where at average high tide during the growing season, the soil is <u>ir</u>regularly inundated by tidal waters. The predominant species is saltmarsh cordgrass (Spartina alterniflora). More open areas often support widgeon grass, eelgrass, and Sago pondweed.

Salt meadow - Areas of a coastal wetland that which support salt tolerant plant species bordering the landward side of salt marshes or open coastal water, where the soil is saturated during the growing sea-son but which is rarely inundated by tidal water. Indigenous plant species include salt meadow cordgrass (Spartina patens) and black rush; common threesquare occurs in fresher areas.

Service drop - any utility line extension which does not cross or run beneath any portion of a water body provided that:

#### 1. in the case of electric service

- a. the placement of wires and/or the installation of utility poles is located entirely upon the premises of the customer requesting service or upon a roadway right-of-way; and
- b. the total length of the extension is less than one thousand (1,000) feet.

#### 2. in the case of telephone service

- a. the extension, regardless of length, will be made by the installation of telephone wires to existing utility poles, or
- b. the extension requiring the installation of new utility poles or placement underground is less than one thousand (1,000) feet in length.

Setback - the nearest horizontal distance from the normal high-water line of a water body or tributary stream, or upland edge of a wetland, to the nearest part of a structure, road, parking space or other regulated object or area.

Shore frontage - the length of a lot bordering on a water body <u>or wetland</u> measured in a straight line between the intersections of the lot lines with the shoreline <u>at normal high water elevation</u>.

Shoreland zone - the land area located within two hundred and fifty (250) feet, horizontal distance, of the normal high-water line of any great pond, or river; or saltwater body; within 250 feet, horizontal distance, of the upland edge of a coastal wetland, including all areas affected by tidal action; within 250 feet of the upland edge of a freshwater wetland; or within seventy-five (75) feet, horizontal distance, of the normal high-water line of a stream.

Shoreline – the normal high-water line, or upland edge of a freshwater or coastal wetland.

Significant River Segments - See Appendix B or Title 38 M.R.S.A. Section 437.

Skid Road or Skid Trail - a route repeatedly used by forwarding machinery or animal to haul or drag forest products from the stump to the yard or landing, the construction of which requires minimal excavation.

Slash - the residue, e.g., treetops and branches, left on the ground after a timber harvest.

Stream - a free-flowing body of water from the outlet of a great pond or the confluence of two (2) perennial streams as depicted on the most recent edition of a United States Geological Survey 7.5 minute series topographic map, or if not available, a 15-minute series topographic map, to the point where the body of water becomes a river or flows to another water body or wetland within the shoreland area.

Structure - anything built for the support, shelter or enclosure of persons, animals, goods or property of any kind, together with anything constructed or erected with a fixed location on or in the ground, exclusive of fences, and poles, wiring and other aerial equipment normally associated with service drops as well as guying and guy anchors. The term includes structures temporarily or permanently located, such as decks, patios, and satellite dishes.

Substantial start - completion of thirty (30) percent of a permitted structure or use measured as a percentage of estimated total cost.

Subsurface sewage disposal system — any system designed to dispose of waste or waste water on or beneath the surface of the earth; includes, but is not limited to: septic tanks; disposal fields; grandfathered cesspools; holding tanks; pretreatment filter, piping, or any other fixture, mechanism, or apparatus used for those purposes; does not include any discharge system licensed under 38 M.R.S.A. section 414, any surface waste water disposal system, or any municipal or quasi-municipal sewer or waste water treatment system.a collection of treatment tank(s), disposal area(s), holding tank(s) and pond(s), surface spray system(s), cesspool(s), well(s), surface ditch(es), alternative toilet(s), or other devices and associated piping designed to function as a unit for the purpose of disposing of wastes or wastewater on or beneath the surface of the earth. The term shall not include any wastewater discharge system licensed under 38 MRSA Section 414, any surface wastewater disposal system licensed under 38 MRSA Section 1-A, or any public sewer. The term shall not include a wastewater disposal system designed to treat wastewater which is in whole or in part hazardous waste as defined in 38 MRSA Chapter 13, subchapter 1.

Sustained slope - a change in elevation where the referenced percent grade is substantially maintained or exceeded throughout the measured area.

Tidal waters – all waters affected by tidal action during the maximum spring tide.

Timber harvesting - the cutting and removal of timber for the primary purpose of selling or processing forest products trees from their growing site, and the attendant operation of cutting and skidding machinery but not the construction or creation of roads. Timber harvesting does not include the clearing of land for approved construction. The cutting or removal of trees in the shoreland zone on a lot that has less than two (2) acres within the shoreland zone shall not be considered timber harvesting. Such cutting or removal of trees shall be regulated pursuant to Section 15 (P), Clearing or Removal of Vegetation for Activities Other Than Timber Harvesting.

<u>Timber harvesting</u> and related activities - timber harvesting, the construction and maintenance of roads used primarily for timber harvesting and other activities conducted to facilitate timber harvesting.

Tributary stream — means a channel between defined banks created by the action of surface water, which is characterized by the lack of terrestrial vegetation or by the presence of a bed, devoid of topsoil, containing waterborne deposits or exposed soil, parent material or bedrock; and which is connected hydrologically with other water bodies. "Tributary stream" does not include rills or gullies forming because of accelerated erosion in disturbed soils where the natural vegetation cover has been removed by human activity.

This definition does not include the term "stream" as defined elsewhere in this Ordinance, and only applies to that portion of the tributary stream located within the shoreland zone of the receiving water body or wetland.

NOTE: Water setback requirements apply to tributary streams within the shoreland zone.

Upland edge of a wetland - the boundary between upland and wetland. For purposes of a coastal wetland, this boundary is the line formed by the landward limits of the salt tolerant vegetation and/or the maximum spring tide level, including all areas affected by tidal action. For purposes of a freshwater wetland, the upland edge is formed where the soils are not saturated for a duration sufficient to support wetland vegetation; or where the soils support the growth of wetland vegetation, but such vegetation is dominated by woody stems that are six (6) meters (approximately twenty (20) foot) tall or taller.

Vegetation - all live trees, shrubs, ground cover, and other plants including without limitation, trees both over and under 4 inches in diameter, measured at 4 1/2 feet above ground level.

Velocity zone - an area of special flood hazard extending from offshore to the inland limit of the primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources.

Volume of a structure - the volume of all portions of a structure enclosed by roof and fixed exterior walls as measured from the exterior faces of these walls and roof.

Water body - any great pond, river, or stream-or tidal area.

Water crossing - any project extending from one bank to the opposite bank of a river, or stream, tributary stream, or wetland whether under, through, or over the water course or wetland. Such projects include but may not be limited to roads, fords, bridges, culverts, water lines, sewer lines, and cables as well as maintenance work on these crossings. This definition includes crossings for timber harvesting equipment and related activities.

Wetland - a freshwater or coastal wetland.

Windfirm - the ability of a forest stand to withstand strong winds and resist windthrow, wind rocking, and major breakage.

Woody Vegetation - live trees or woody, non-herbaceous shrubs.

Wetlands associated with great ponds and rivers—wetlands contiguous with or adjacent to a great pond or river, and which during normal high water, are connecteed by surface water to the great pond or river. Also included are wetlands which are separated from the great pond or river by a berm, causeway, or similar feature less than 100 feet in width, and which have a surface elevation at or below the normal high water line of the great pond or river. Wetlands associated with great ponds or rivers are considered to be part of that great pond or river.

# 1. Appendix A:

# ALTERNATIVE TO 30% EXPANSION RULE PURSUANT TO TITLE 38 M.R.S.A. SECTION 439-A SUBSECTION 4-A

# Section 12.C. Non-conforming Structures

- (1) Expansions. A non-conforming structure may be added to or expanded after obtaining a permit from the same permitting authority as that for a new structure, if such addition or expansion does not increase the non-conformity of the structure, and is in accordance with subparagraphs (a), and (b) below.
  - (a) Legally existing non-conforming principal and accessory structures that do not meet the water body, tributary stream, or wetland setback requirements may be expanded or altered as follows, as long as all other applicable standards contained in this Ordinance are met.
    - i. Expansion of any portion of a structure within 25 feet, horizontal distance, of the normal high-water line of a water body, tributary stream, or upland edge of a wetland is prohibited, even if the expansion will not increase nonconformity with the water body, tributary stream or wetland setback requirement.
    - ii. Expansion of an accessory structure that is located closer to the normal high-water line of a water body, tributary stream, or upland edge of a wetland than the principal structure is prohibited, even if the expansion will not increase nonconformity with the water body or wetland setback requirement.
    - iii. For structures located less than 75 feet, horizontal distance, from the normal high-water line of a water body, tributary stream, or upland edge of a wetland, the maximum combined total floor area for all portions of those structures within that 75-foot distance is 1,000 square feet, and the maximum height of any portion of a structure that is within 75 feet, horizontal distance, of a water body, tributary stream or upland edge of a wetland is 20 feet or the height of the existing structure, whichever is greater.
    - iv. For structures located less than 100 feet, horizontal distance, from the normal high-water line of a great pond classified as GPA or a river flowing to a great pond classified as GPA, the maximum combined total floor area for all portions of those structures within that 100-foot distance is 1,500 square feet, and the maximum height of any portion of a structure that is within 100 feet, horizontal distance, of a great pond is 25 feet or the height of the existing structure, whichever is greater, except that any portion of those structures located less than 75 feet, horizontal distance from the normal high-water line of a water body, tributary stream, or the upland edge of a wetland must meet the floor area and height limits of division (iii).

For the purposes of subparagraph-Section 12(C)(1)(a), a basement is not counted toward floor area.

(b) Construction or enlargement of a foundation beneath the existing structure is not considered an expansion of the structure provided: that the structure and new foundation are placed such that the setback requirement is met to the greatest practical extent as determined by the Planning

Board or its designee, basing its decision on the criteria specified in paragraph 2 Relocation, below; that the completed foundation does not extend beyond the exterior dimensions of the structure; and that the foundation does not cause the structure to be elevated by more than three (3) additional feet. Whenever a new, enlarged, or replacement foundation is constructed under a non-conforming structure, the structure and new foundation must be placed such that the setback requirement is met to the greatest practical extent as determined by the Planning Board or its designee, basing its decision on the criteria specified in Section 12(C)(2) Relocation, below. If the completed foundation does not extend beyond the exterior dimensions of the structure and the foundation does not cause the structure to be elevated by more than three (3) additional feet, as measured from the uphill side of the structure, it shall not be considered to be an expansion of the structure.

NOTE: The special expansion allowance provided below is available to municipalities that wish to allow a greater expansion limit if the landowner has maintained a quality 50 foot buffer along the water body, tributary stream or wetland, or agrees to plant such a buffer, and agrees to implement certain measures to reduce erosion and sedimentation from the property. If the municipality does not have adequate resources to ensure compliance with this provision, the department recommends that it not be incorporated into the ordinance.

- (1-A) Special expansion allowance. Existing principal and accessory structures that exceed the floor area or height limits set in Section 12(C)(1)(a)(iii) and Section 12(C)(1)(a)(iv) in divisions (iii) and (iv) above, may not be expanded, except that the limits may be exceeded by not more than 500 square feet provided that all of the following requirements are met.
  - (a) The principal structure is set back at least 50 feet, horizontal distance, from the normal high-water line of a water body, tributary stream or upland edge of a wetland.
  - (b) A well-distributed stand of trees and other <a href="natural">natural</a> vegetation</a> as defined in Section</a> <a href="15(P)(2)(b)">15(P)(2)(b)</a>, extends at least 50 feet, horizontal distance, in depth as measured from the normal high-water line or upland edge for the entire width of the property. A "well-distributed stand of trees and other vegetation" adjacent to a great pond classified GPA or a river flowing to a great pond classified GPA, is defined as maintaining a rating score of 12 or more in any 25 foot by 25 foot square (625 square feet) area as determined by the following rating system.

Diameter of tree at 4 1/2 feet above ground level (inches)

2-4 inches

>4-12 inches

>12 inches

Adjacent to other water bodies, tributary streams, and wetlands, a "well-distributed stand of trees and other vegetation" is defined as maintaining a minimum rating score of 8 per 25-foot square area.

If a well-distributed stand of trees and other vegetation meeting the requirements of  $\underline{\text{Section } 15(P)(2)(b)\text{this subparagraph}}$  is not present, the 500 square foot special expansion allowance may be permitted only in conjunction with a written plan, including

a scaled site drawing, by the property owner, and approved by the <u>pP</u>lanning <u>bB</u>oard or its designee, to reestablish a buffer of trees, shrubs, and other ground cover within 50 feet, horizontal distance, of the shoreline or tributary stream. <u>normal high water line or upland edge of a wetland.</u>

- (c) Adjacent to great ponds classified GPA and rivers flowing to great ponds classified GPA, except for the allowable footpath, there exists complete natural ground cover, consisting of forest duff, shrubs and other woody and herbaceous vegetation within 50 feet, horizontal distance, of the normal high-water line. Where natural ground cover is lacking the area must be supplemented with leaf or bark mulch and plantings of native shrubs, and other woody and herbaceous vegetation in quantities sufficient to retard erosion and provide for effective infiltration of stormwater.
- (d) A written plan by the property owner, including a scaled site drawing, is approved by the <u>pP</u>lanning <u>bB</u>oard and is developed, implemented, and maintained to address the following mitigation measures for the property within the shoreland zone.
  - (i) Unstabilized areas resulting in soil erosion must be mulched, seeded, or otherwise stabilized and maintained to prevent further erosion and sedimentation to water bodies, tributary streams, and wetlands.
  - (ii) Roofs and associated drainage systems, driveways, parking areas, and other nonvegetated surfaces must be designed or modified, as necessary, to prevent concentrated flow of storm water runoff from reaching a water body, tributary stream or wetland, Where possible, runoff must be directed through a vegetated area or infiltrated into the soil through the use of a dry well, stone apron, or similar device.
- (1-B) Planting requirements. Any planting or revegetation required as a condition to the Special Expansion Allowance must be in accordance with a written plan drafted by a qualified professional, be implemented at the time of construction, and be designed to meet the rating scores contained in paragraph (b) and the ground cover requirements of paragraph (c) when the vegetation matures within the 50 foot strip. At a minimum, the plan must provide for the establishment of a well-distributed planting of saplings spaced so that there is at least one sapling per 80 square feet of newly established buffer. Planted saplings may be no less than three (3) feet tall for coniferous species and no less than six feet tall for deciduous species. The planting plan must include a mix of at least three native tree species found growing in adjacent areas, with no one species making up more than 50% of the number of saplings planted unless otherwise approved by the pPlanning bBoard or its designee, based on adjacent stand comparison. All aspects of the implemented plan must be maintained by the applicant and future owners.

NOTE: Municipalities are encouraged to specify those professions which they deem qualified to prepare planting and mitigation plans, taking into account the availability of those professionals in the region. Such professionals may include, but are not limited to, foresters, arborists, landscape architects, and landscape contractors.

(1-C) Filing and reporting requirements. Written plans required pursuant to this sSection 12(C)(1-A)(d) must be filed with the registry of deeds of the county in which the property is

located. A copy of all permits issued pursuant to this section must be forwarded by the municipality to the department within 14 days of the issuance of the permit.

# **APPENDIX B**

# 38 §437. Significant river segments identified

For purposes of this chapter, significant river segments include the following:

- 1. Aroostook River. The Aroostook River from St. Croix Stream in Masardis to the Masardis and T.10, R.6, W.E.L.S. townline, excluding segments in T.9, R.5, W.E.L.S.; including its tributary the Big Machias River from the Aroostook River in Ashland to the Ashland and Garfield Plantation townlines;
- **2. Dennys River.** The Dennys River from the railroad bridge in Dennysville Station to the dam at Meddybemps Lake, excluding the western shore in Edmunds Township and No. 14 Plantation;
- 3. East Machias River. The East Machias River from 1/4 of a mile above the Route 1 bridge in East Machias to the East Machias and T.18, E.D., B.P.P. townline, and from the T.19, E.D., B.P.P. and Wesley townline to the outlet of Crawford Lake in Crawford, excluding Hadley Lake;
- 4. Fish River. The Fish River from the bridge in Fort Kent Mills to the outlet of Eagle Lake in Wallagrass, and from the Portage Lake and T.14, R.6, townline to the Portage Lake and T.13, R.7, W.E.L.S. townline, excluding Portage Lake;
- **5. Machias River.** The Machias River from the Whitneyville and Machias townline to the Northfield T.19, M.D., B.P.P. townline;
- 6. Mattawamkeag River. The Mattawamkeag River from the outlet of Mattakeunk Stream in Winn to the Mattawamkeag and Kingman Township townline, and from the Reed Plantation and Bancroft townline to the East Branch, including its tributaries the West Branch from the Mattawamkeag River to the Haynesville T.3, R.3, W.E.L.S. townline and from its inlet into Upper Mattawamkeag Lake to the Route 2 bridge; the East Branch from the Mattawamkeag River to the Haynesville and Forkstown Township townline and from the T.4, R 3, W.E.L.S. and Oakfield townline to Red Bridge in Oakfield; the Fish Stream from the Route 95 bridge in Island Falls to the Crystal-Patten townline; and the Baskehegan Stream from its inlet into Crooked Brook Flowage in Danforth to the Danforth and Brookton Township townline;
- 7. Narraguagus River. The Narraguagus River from the ice dam above the railroad bridge in Cherryfield to the Beddington and Devereaux Township townline, excluding Beddington Lake;
- **8. East Branch of Penobscot.** The East Branch of the Penobscot from the Route 157 bridge in Medway to the East Millinocket and Grindstone Township townline;
- 9. Pleasant River. The Pleasant River from the railroad bridge in Columbia Falls to the Columbia and T.18, M.D., B.P.P. townline, and from the T.24, M.D., B.P.P. and Beddington townline to the outlet of Pleasant River Lake;
- **10. Rapid River.** The Rapid River from the Magalloway Plantation and Upton townline to the outlet of Pond in the River;
- 11. West Branch Pleasant River. The West Branch Pleasant River from the East Branch to the Brownville and Williamsburg Township townline; and
- **12. West Branch of Union River.** The West Branch of the Union River from the Route 9 bridge in Amherst to the outlet of Great Pond in the Town of Great Pond.

# STATUTORY AUTHORITY: 38 M.R.S.A. Section 438-A(5)

EFFECTIVE DATE: January 13, 1988 (Filed as 06-101, Ch. 1)

AMENDED: March 24, 1990 (Filed as 06-096, Ch. 1000)

June 19, 1991 - Sections 15 and 17

July 14, 1992 - Sections 4, 8, 9, 12, 15, 16 & 17

August 7, 1994 - Sections 3, 14 & 16

EFFECTIVE DATE (ELECTRONIC CONVERSION): May 5, 1996

NON-SUBSTANTIVE CORRECTIONS:

December 29, 1997 - minor spelling and formatting. April 1, 1998 - minor renumbering and formatting.

AMENDED: February 6, 1999

February 13, 2000

May 1, 2006

## MAINE GUIDELINES FOR MANURE AND MANURE SLUDGE DISPOSAL ON LAND

Published by: The Life Sciences and Agriculture Experiment Station and the

Cooperative Extension Service, University of Maine at Orono and

The Maine Soil and Water Conservation Commission

# Miscellaneous Report 142

July 1972

#### AGENCIES AND ORGANIZATIONS IN SUPPORT OF THESE GUIDELINES

Agricultural Stabilization and Conservation Service

Board of Supervisors, The Androscoggin Valley Soil and Water Conservation District

Board of Supervisors, The Franklin County Soil and Water Conservation District College of Life Sciences and Agriculture, University of Maine

Cooperative Extension Service

Farmers Home Administration, USDA

Governor's Agricultural Council

Governor's Dairy and Livestock Committee

**Maine Audubon Society** 

**Maine Farm Credit Service** 

Maine Life Sciences and Agriculture Experiment Station

**Maine Municipal Association** 

**Maine Plant Food Society** 

**Maine Poultry Association** 

**Maine Soil and Water Conservation Commission** 

**Maine State Grange** 

**Natural Resources Council of Maine** 

Pine Tree Chapter, Soil Conservation Society of America

Penobscot Piscataquis County Farm Bureau

Soil Conservation Service, USDA

State of Maine Department of Agriculture

State of Maine Department of Environmental Protection

State of Maine Department of Sea and Shore Fisheries

State of Maine Forestry Department

State of Maine Land Use Regulation Commission

**State Planning Office** 

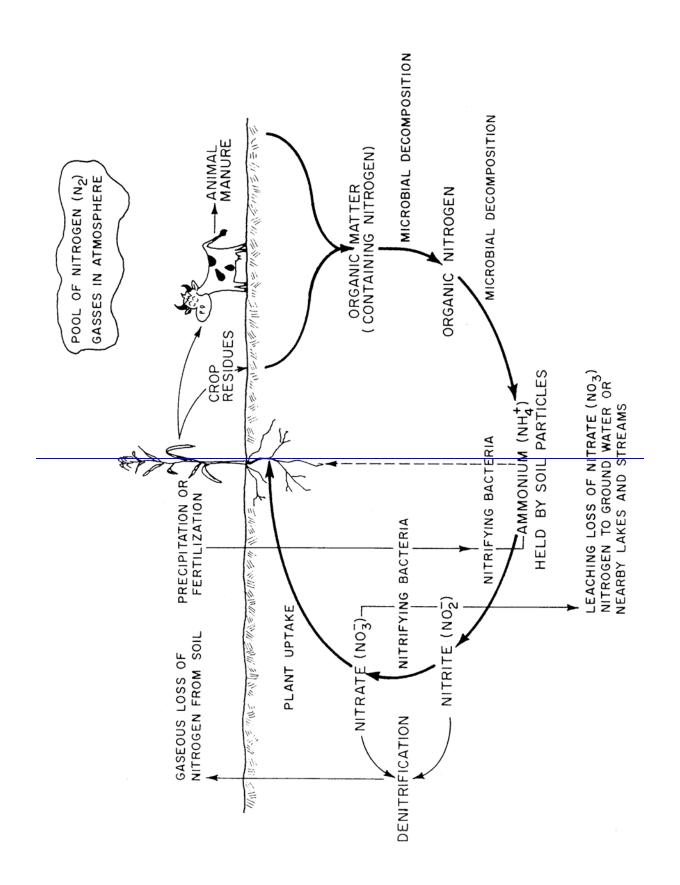
University of Maine Land and Water Resources Center

The diagram on the opposite page shows that when animal manure is applied to soils it is decomposed by microbes. The complex protein in the material is eventually broken down to release the nitrogen which was contained in it. The first nitrogen ion to be released is ammonium (NH4+). In warm, well-drained soils which contain a favorable balance of water and air the "aerobic" microbes soon convert ammonium nitrogen to nitrite (NO2-) and then to nitrate (NO3-) nitrogen.

When nitrogen reaches the nitrate form it is easily taken up by plants and built back into protein compounds.

However, when nitrogen is in the nitrate form it is also easily leached downward when the soil is saturated. Under these conditions surface and ground water contamination may occur if excessive rates of nitrogen have been applied to the soil.

In soils which are wet for extended periods of time the absence of air causes "anaerobie" microbes to convert the nitrate nitrogen to gaseous forms which then escape from the soil and enter the atmosphere. Thus the cycle of nature is complete.



Chapter 1000: Guidelines for Municipal Shoreland Zoning Ordinances

### MAINE GUIDELINES FOR MANURE AND MANURE SLUDGE DISPOSAL ON LAND

## 1. Scope

The guidelines pertain to: total annual animal and poultry manure disposal on the land after removal from the barn, poultry house or other storage areas.

a. total recycling of nutrients through planned crop production

b. disposing of excess manure on the land by spreading

c. piling on the land

d. bulk burying in landfill

e. composting

f. lagoon treatment with sludge and liquid disposal

g, disposal by irrigation

h. dehydrated manure disposal

2. Objective

To establish uniform guidelines for disposal of agricultural manure that will protect human and animal health, minimize pollution and environmental abuse, limit nuisances, and be economically sound.

### 3. Intent

These guidelines provide the landowner with alternative criteria for manure disposal within the context of the stated objective. It is recognized that regulatory agencies such as the Environmental Improvement Commission, the Department of Health and Welfare, and the Department of Agriculture, receive increasing numbers of environmental and nuisance complaints resulting from various manure disposal practices.

These guidelines have been developed from the best technical information available, combined with the best judgment of the various state and federal agencies, educational institutions and resource groups, with expertise in soils, agricultural manure management or environmental management. They will be reviewed and updated periodically and will serve as a basis for impartial review and judgment of animal manure disposal practices affecting the landowner and the public.

### 4. Technical Criteria

Maximum rates for spreading manure on the land and for other disposal method" are developed from the physical and chemical characteristics of each Individual soil identified and described by the National Standard Cooperative Soil Survey in Maine and from the accumulated research and technical knowledge of the movement of manure liquids and residues on and through each soil type.

The limiting factor in determining application rates is the pounds of nitrogen per acre to be applied; however, estimating a 1% nitrogen content for the poultry manure group and 0.5% nitrogen content for the cattle manure group, the application rate in tons of manure per acre is presented as a guide.

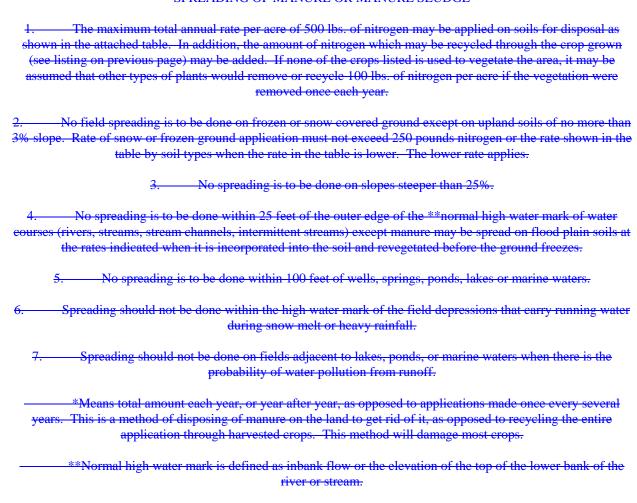
## CONDITIONS FOR RECYCLING ENTIRE MANURE APPLICATION THROUGH CROPS

- 1. No field spreading is to be done on frozen or snow covered ground except on upland soils of no more than 3% slope. Rate of application on snow or frozen ground must not exceed 250 pounds of nitrogen per acre or the rate shown in the tables by soil type when the rate in the table is lower. The lower rate applies.
- 2. Commercial fertilizer containing nitrogen must not be added to the application in such a way that it would increase the total nitrogen application, in any given year, above the figures shown for recycling.
- No manure or manure sludge is to be applied within a distance of 25 feet from the high water mark of any body of water.
- 4. No manure or manure sludge is to be applied within a distance of 100 feet from wells, springs, ponds, lakes and marine waters.
  - Periodic tests for nitrogen content of manure should be made.
  - 6. Spreading should not be done on fields adjacent to ponds, lakes and marine waters when there is the probability of water pollution from runoff.
    - 7. No spreading is to be done on slopes steeper than 25%,
- 8. Spreading should not be done within the high water mark of the field depressions or highway ditches that carry running water during snow melt or heavy rainfall.
- Total recycling of the nitrogen can be expected to take place under conditions of sound crop management so long as the following rates of nitrogen application per acre are not exceeded. Therefore, disposal by recycling is limited to the following maximums when the crop is harvested, and these rates may be added to those listed for disposal in the table on Appendix page 14.

| Crop                    | Lbs. Nitrogen per Acre per Year  |
|-------------------------|----------------------------------|
| Corn                    | <del>250</del>                   |
| *Grass-Hay (3 harvests) | 300 (3 applications - 100 each)  |
| *Oats                   | <del>50</del>                    |
| *Summer Annuals         | <del>200</del>                   |
| *Blueberries            | <del>50</del>                    |
| *Potatoes               | 150-180 (depending upon variety) |
| *Sugar beets            | <del>60</del>                    |

\*If applications to these crops are exceeded, crop quality may be endangered.

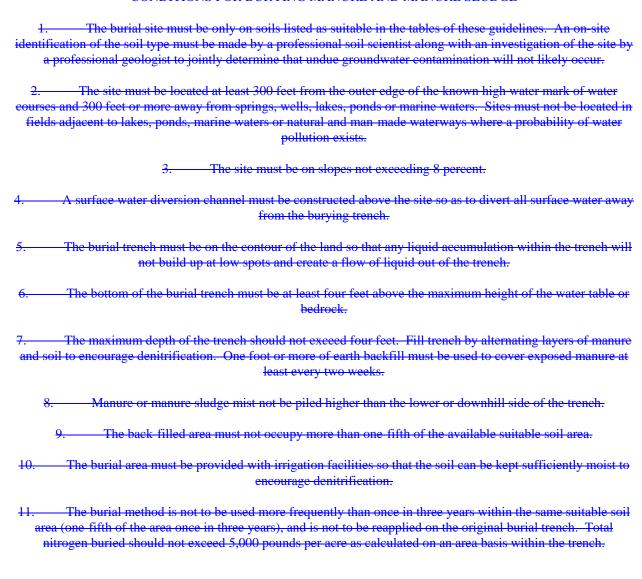
# CONDITIONS FOR \*REPEATED ANNUAL DISPOSAL SPREADING OF MANURE OR MANURE SLUDGE



#### CONDITIONS FOR PILING MANURE OR MANURE SLUDGE

- 1. The piling site, except for immediate spreading, must be only on the soils listed as suitable in the tables of these guidelines or on sites of other soils identified by a professional soil scientist.
  - 2. No manure or manure sludge is to be left piled on the land for more than a one year period.
- 3. The piling site except for immediate spreading, must be located at least 300 feet from the cuter edge of the known high water mark of water courses and 300 feet or more away from springs or wells, lakes, ponds and marine waters.
  - 4. The site must not be on slopes exceeding 8 percent.
  - 5. Piling must not be done on land adjacent to lakes, ponds, marine waters, or natural and man made waterways when there is the probability of water pollution.
    - 6. Piling site will not be located in natural drainage ways such as gullies and ravines.
- 7. The piling site should be located such that drift of obnoxious odors downwind to places of habitation will be minimized.

#### CONDITIONS FOR BURYING MANURE AND MANURE SLUDGE



#### **CONDITIONS FOR COMPOSTING MANURE**

Must be done only on soils shown as suitable for composting in the attached table of these guidelines.
 An on site investigation must be made by a professional soil scientist to identify the soil type along with an on site investigation by a professional geologist to jointly determine that undue groundwater contamination will not likely occur.
 Should not be done on slopes exceeding 8 percent.
 Should not be done on fields adjacent to lakes, ponds, marine waters or natural and man made waterways where there is the probability of water pollution.
 Should not be done within 300 feet of lakes, ponds, marine waters, wells or streams,
 Mix manure or manure sludge and soil in a 1 to 1 ratio based on volume.
 Accomplish by curbing soil from a trench about one foot deep, filled with manure, then mixed evenly with soil. Trenching and curbing should be on the contour.
 All surface drainage must be diverted from the composting area.
 Runoff from the composting area must be contained by dyking.

Compost material must be removed from the area within one year.

The same soil areas cannot be re-used more often than every other year.

#### CONDITIONS FOR LAGOONING AND DISPOSAL FROM LAGOONS

- The landowner must obtain the necessary approval from the Maine Department of Agriculture and/or the
  Department of Health and Welfare so he is sure to meet the applicable sanitary requirements of the appropriate
  regulatory agencies.
- 2. Lagoons must be located on soils rated as suitable for lagoons in the current Maine Soil Suitability Guide.

  An on-site identification of the soil type must be made by a professional soil scientist.
  - 3. Lagoons must be a minimum of 300 feet from wells, springs, fresh and marine bodies of water, public roads and dwellings.
  - 4. Specifications for design are to be those recommended by a professional engineer and approved by an appropriate state or federal agency.
- 5. Liquid from the lagoon must be disposed of via irrigation or a suitable leaching bed. The irrigation alternative in these guidelines applies when irrigation is used. The attached tables show the amounts of nitrogen that nay be applied via irrigation and the soils suitable for leaching beds.
- 6. Sludge from the lagoons must be properly disposed of on land. Maximum nitrogen rates for spreading are shown in the attached table. Soils suitable for piling, composting, or burying are shown in the attached table. Conditions listed for spreading, burying, piling or composting apply.

# CONDITIONS FOR IRRIGATION OF LIQUID MANURE OR LAGOON EFFLUENT ON LAND

- 1. Apply only to soils shown in the attached table as suitable for liquid manure irrigation.
- 2. Do not exceed in any year the application of nitrogen shown in the attached table as the maximum application per year. The maximum 500 lbs. nitrogen applies on soils as shown in the table.
  - 3. Tests for amounts of nitrogen should be taken as the spray falls upon the ground.
  - 4. Spraying must not be done within 100 feet of wells, springs, lakes, ponds or marine waters.
- Irrigation tables must be used for determining rates per hour and maximum volume application per day or period of time.
- 6. Irrigation must not be done during periods when the ground is saturated or nearly saturated with water, or when the ground is frozen or snow covered.
- Irrigation of liquid manure should not be done on fields adjacent to lakes, ponds, marine waters or natural
  and man made waterways when there is the probability of water pollution from runoff.

### **CONDITIONS FOR DEHYDRATED MANURE**

1. Keep dry while in storage to prevent odors.

2. Nitrogen loss through dehydration changes the percentage of nitrogen; therefore, nitrogen content of the dehydrated residue must be determined periodically. Maximum pounds of nitrogen shown in the attached table is the only usable guide to maximum rates of applications on the land.

3. The conditions for spreading, piling, burying, or composting apply when one of these disposal methods is used.

|                             | SPREADING  Cattle, Horse Manure, Sludge | IRRIGATION  Poultry, Sheep, Hog Manure | PILING           | BURYING        | COMPOST-<br>ING                        | LEACH-<br>ING<br>BEDS |
|-----------------------------|---|--|------------------|----------------|--|-----------------------|
| FLOOD PLAIN SOILS           | Lbs. 2<br>Lbs. Nitro-<br>gen            | Tons<br>Manure                         | Lbs. 2<br>Nitro- | Tons<br>Manure | <del>Lbs.</del><br><del>Nitrogen</del> |                       |
| Alluvial land               | 0                                       | 0                                      | 0                | 0              | 0                                      | No                    |
| Hadley silt loam            | <del>500</del>                          | <del>50</del>                          | <del>500</del>   | <del>25</del>  | <del>500</del>                         | No                    |
| Limerick silt loam          | 0                                       | 0                                      | 0                | 0              | 0                                      | No                    |
| Limerick Saco silt loam     | 0                                       | 0                                      | 0                | 0              | 0                                      | No                    |
| Ondawa fine sandy loam      | <del>200</del>                          | <del>20</del>                          | 200              | <del>10</del>  | <del>200</del>                         | No                    |
| Podunk fine sandy loam      | <del>100</del>                          | <del>10</del>                          | 100              | <del>5</del>   | 100                                    | No                    |
| Rumney fine sandy loam      | 0                                       | 0                                      | 0                | 0              | 0                                      | No                    |
| Saco silt loam              | 0                                       | 0                                      | 0                | 0              | 0                                      | No                    |
| Suncook loamy sand          | 0                                       | 0                                      | 0                | 0              | 0                                      | No                    |
| Winooski silt loam          | <del>300</del>                          | <del>30</del>                          | <del>300</del>   | <del>15</del>  | <del>300</del>                         | No                    |
| INLAND SOILS                | 100                                     | <del>10</del>                          | 100              | <del>5</del>   | 100                                    | No                    |
| Adams loamy sand            |   |  |                  |                |  |                       |
| Adams very stony loamy sand | <del>100</del>                          | <del>10</del>                          | <del>100</del>   | <del>5</del>   | <del>100</del>                         | No                    |
| Agawam fine sandy loam      | <del>200</del>                          | <del>20</del>                          | 200              | <del>10</del>  | <del>200</del>                         | S                     |
| Allagash fine sandy loam    | <del>200</del>                          | <del>20</del>                          | <del>200</del>   | <del>10</del>  | <del>200</del>                         | S                     |

Based on maximum rates of allowable application for disposal and not on effects of plant growth or production. Rates of nitrogen for recycling listed on page 3 may be added to those listed in the table.

Pounds of nitrogen, rather than tons, is the controlling item in all cases. The figure on tons is an average guide based upon 1% nitrogen content for the cattle manure and sludge group.

TABLE SHOWING MAXIMUM ACCEPTABLE DISPOSAL RATES OF
MANURE OR MANURE SLUDGE APPLICATION PER ACRE PER YEAR
ON MAINE SOILS AND SOILS SUITABLE FOR BULK PILING, BURYING, COMPOSTING, IRRIGATION,
AND LEACHING BEDS

|                                    |                   | SPRE/         | DING              |                   | IRRIG          | PILING       | BURY           | <del>COM</del> - | <b>LEACH</b>   |
|------------------------------------|-------------------|---------------|-------------------|-------------------|----------------|--------------|----------------|------------------|----------------|
|                                    | Cattle,           | Horse         | Poultry           | , Sheep,          | TION           |              | <del>ING</del> | POST             | <del>ING</del> |
|                                    | Manure            | , Sludge      | Hog N             | <del>1anure</del> |                |              |                | <del>ING</del>   | BEDS           |
|                                    | Lbs. <sup>2</sup> | Tons          | Lbs. <sup>2</sup> | Tons              | Lbs.           |              |                |                  |                |
|                                    | Nitro-            | Manure        | Nitro-            | Manure            | Nitro-         |              |                |                  |                |
|                                    | <del>gen</del>    |               | <del>gen</del>    |                   | <del>gen</del> |              |                |                  |                |
| AuGres loamy sand                  | 0                 | 0             | 0                 | 0                 | 0              | No           | No             | No               | No             |
| Bangor silt loam                   | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S            | \$             | <u>\$</u>        | S              |
| Bangor very stony silt loam        | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S            | \$             | No               | S              |
| Bangor very stony silt loam (heavy | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S            | <del>2</del>   | No               | S              |
| <del>substratum)</del>             |                   |               |                   |                   |                |              |                |                  |                |
| Bangor silt loam(moderately deep)  | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | <del>S</del> | No             | No               | No             |
| Belgrade very fine sandy loam      |                   |               |                   |                   |                |              |                |                  |                |
|                                    | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No           | No             | No               | No             |
| Belgrade silt loam                 | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No           | No             | No               | No             |
| Benson silt loam                   | 0                 | 0             | 0                 | 0                 | 0              | No           | No             | No               | No             |
| Berkshire fine sandy loam          | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S            | \$             | <u>\$</u>        | S              |
| Berkshire very stony fine sandy    | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | <del>S</del> | <del>5</del>   | No               | S              |
| <del>loam</del>                    |                   |               |                   |                   |                |              |                |                  |                |
| Berkshire loam                     | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | <u>\$</u>    | \$             | S                | S              |
| Berkshire extremely stony fine     | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | <u>\$</u>    | <del>S</del>   | No               | S              |
| <del>sandy loam</del>              |                   |               |                   |                   |                |              |                |                  |                |
| Biddeford silt loam                | 0                 | 0             | 0                 | 0                 | 0              | No           | No             | No               | No             |
| Biddeford silty clay loam          | 0                 | 0             | 0                 | 0                 | 0              | No           | No             | No               | No             |
| Biddeford stony silt loam          | 0                 | 0             | 0                 | 0                 | 0              | No           | No             | No               | No             |
| Burnham silt loam                  | θ                 | 0             | θ                 | 0                 | 0              | No           | No             | No               | No             |
| Burnham very stony silt loam       | 0                 | 0             | 0                 | 0                 | 0              | No           | No             | No               | No             |
| Buxton silt loam                   | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | S            | No             | No               | No             |
| Buxton very stony silt loam        | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | <del>S</del> | No             | No               | No             |
| Buxton, Biddeford, Scantic, stony  | 0                 | 0             | 0                 | 0                 | 0              | No           | No             | No               | No             |
| <del>silt loam</del>               |                   |               |                   |                   |                |              |                |                  |                |

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|  |                   | SPREA               | DING              |                   | <del>IRRIG</del> | PILING | BURY           | COM-           | <b>LEACH</b>    |
|--|-------------------|---------------------|-------------------|-------------------|------------------|--------|----------------|----------------|-----------------|
|  | Cattle,           | . Horse             | Poultry           | , Sheep,          | TION             |        | <del>ING</del> | POST-          | <del>ING</del>  |
|  |                   | <del>, Sludge</del> |                   | <del>Aanure</del> |                  |        |                | <del>ING</del> | <del>BEDS</del> |
|  | Lbs. <sup>2</sup> | <del>Tons</del>     | Lbs. <sup>2</sup> | Tons              | Lbs.             |        |                |                |                 |
|  | Nitro-            | Manure              | Nitro-            | Manure            | Nitro-           |        |                |                |                 |
|  | <del>gen</del>    |                     | <del>gen</del>    |                   | <del>gen</del>   |        |                |                |                 |
| Canaan sandy loam                      | <del>100</del>    | <del>10</del>       | <del>100</del>    | <del>5</del>      | <del>100</del>   | No     | No             | No             | No              |
| Canaan very rocky sandy loam           | 0                 | 0                   | 0                 | 0                 | 0                | No     | No             | No             | No              |
| Canaan extremely rocky sandy           | 0                 | 0                   | 0                 | 0                 | 0                | No     | No             | No             | No              |
| <del>loam</del>                        |                   |                     |                   |                   |                  |        |                |                |                 |
| Canandaigua silt loam                  | 0                 | 0                   | 0                 | 0                 | 0                | No     | No             | No             | No              |
| Caribou gravelly loam                  | <del>300</del>    | <del>30</del>       | <del>300</del>    | <del>15</del>     | <del>300</del>   | No     | No             | No             | No              |
| Charlton very stony fine sandy loam    | <del>500</del>    | <del>50</del>       | <del>500</del>    | 25                | <del>500</del>   | S      | S              | No             | S               |
| Charlton extremely stony fine          | <del>500</del>    | <del>50</del>       | <del>500</del>    |                   |                  |        |                |                |                 |
| sandy loam                             |                   |                     |                   | <del>25</del>     | <del>500</del>   | S      | <u>\$</u>      | No             | S               |
| Coastal beaches                        | 0                 | 0                   | 0                 | 0                 | 0                | No     | No             | No             | No              |
| Coastal beaches and Lake beaches       | 0                 | 0                   | 0                 | 0                 | 0                | No     | No             | No             | No              |
| Colbath gravelly loam                  | <del>100</del>    | <del>10</del>       | <del>100</del>    | <del>5</del>      | <del>100</del>   | No     | No             | No             | No              |
| Colbath very rocky loam                | 0                 | 0                   | 0                 | 0                 | 0                | No     | No             | No             | No              |
| Colton gravelly loamy sand             | 100               | <del>10</del>       | 100               | <del>5</del>      | <del>100</del>   | No     | No             | No             | No              |
| Colton loamy fine sand (dark           | 100               | <del>10</del>       |                   | <del>5</del>      | <del>100</del>   | No     | No             | No             | No              |
| <del>mat.)</del>                       |                   |                     | <del>100</del>    |                   |                  |        |                |                |                 |
| Colton sandy loam                      | 100               | <del>10</del>       | 100               | <del>5</del>      | <del>100</del>   | No     | No             | No             | No              |
| Colton cobbly sandy loam (dark mat.)   | 0                 | 0                   | 0                 | 0                 | 0                | No     | No             | No             | No              |
| Colton gravelly sandy loam (dark mat.) | 100               | 10                  | 100               | 5                 | 100              | No     | No             | No             | No              |
| Colton very stony sandy loam           | 100               | <del>10</del>       | 100               | <del>5</del>      |                  |        |                |                |                 |
| 10000                                  |                   |                     |                   |                   | <del>100</del>   | No     | No             | No             | No              |
| Colton extremely stony sandy loam      | 100               | <del>10</del>       | 100               | 5                 | 100              | No     | No             | No             | No              |
| Crary fine sandy loam                  | 300               | <del>30</del>       | 300               | <del>15</del>     | <del>300</del>   | No     | No             | No             | No              |
| Conant silt loam                       | <del>300</del>    | <del>30</del>       | <del>300</del>    | 15                | 300              | No     | No             | No             | No              |

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TABLE SHOWING MAXIMUM ACCEPTABLE DISPOSAL RATES OF
MANURE OR MANURE SLUDGE APPLICATION PER ACRE PER YEAR
ON MAINE SOILS AND SOILS SUITABLE FOR BULK PILING, BURYING, COMPOSTING, IRRIGATION,
AND LEACHING BEDS

| <b>SPREADING</b> | IRRIG- | <b>PILING</b> | <b>BURY</b> | COM- | <b>LEACH</b> |
|------------------|--------|---------------|-------------|------|--------------|
|------------------|--------|---------------|-------------|------|--------------|

|                                  |                | Horse         |                   | , Sheep,          | TION           |           | ING | POST           | ING<br>DEDC |
|----------------------------------|----------------|---------------|-------------------|-------------------|----------------|-----------|-----|----------------|-------------|
|                                  |                | , Sludge      |                   | <del>Aanure</del> | T 1            |           |     | <del>ING</del> | BEDS        |
|                                  | Lbs. 2         | Tons          | Lbs. <sup>±</sup> | Tons              | Lbs.           |           |     |                |             |
|                                  | Nitro-         | Manure        | Nitro-            | Manure            | Nitro-         |           |     |                |             |
|                                  | <del>gen</del> |               | <del>gen</del>    |                   | <del>gen</del> |           |     |                |             |
| Cut and fill land                | 0              | 0             | 0                 | 0                 | 0              | No        | No  | No             | No          |
| <del>Daigle silt loam</del>      | <del>300</del> | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No        | No  | No             | No          |
| Daigle stony silt loam           | <del>300</del> | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No        | No  | No             | No          |
| Daigle very stony silt loam      | <del>300</del> | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No        | No  | No             | No          |
| Deerfield sandy loam             | <del>100</del> | <del>10</del> | <del>100</del>    | <del>5</del>      | <del>100</del> | No        | No  | No             | No          |
| Deerfield loamy sand             | 100            | <del>10</del> | 100               | <del>5</del>      | <del>100</del> | No        | No  | No             | No          |
| Dixmont silt loam                | <del>300</del> | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No        | No  | No             | No          |
| Dixmont very stony silt loam     | <del>300</del> | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No        | No  | No             | No          |
| Duane sandy loam                 | 100            | <del>10</del> | 100               | <del>5</del>      | <del>100</del> | No        | No  | No             | No          |
| Dune land                        | 0              | 0             | 0                 | 0                 | 0              | No        | No  | No             | No          |
| Dune land and Coastal Beach      | 0              | 0             | 0                 | 0                 | 0              | No        | No  | No             | No          |
| Easton-Washburn stony silt loam  |                |               |                   |                   |                |           |     |                |             |
| •                                | 0              | 0             | 0                 | 0                 | 0              | No        | No  | No             | No          |
| Elmwood fine sandy loam          | <del>300</del> | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No        | No  | No             | No          |
| Fredon-Halsey silt loam          | 0              | 0             | 0                 | 0                 | 0              | No        | No  | No             | No          |
| Fresh Water Marsh                | 0              | 0             | 0                 | 0                 | 0              | No        | No  | No             | No          |
| Gloucester sandy loam            | <del>200</del> | <del>20</del> | <del>200</del>    | <del>10</del>     | <del>200</del> | <u>\$</u> | No  | No             | No          |
| Gloucester very stony sandy loam |                |               |                   |                   |                |           |     |                |             |
|                                  | <del>200</del> | <del>20</del> | <del>200</del>    | <del>10</del>     | <del>200</del> | <u>\$</u> | No  | No             | No          |
| Gloucester extremely stony sandy |                |               |                   |                   |                |           |     |                |             |
| <del>loam</del>                  | <del>200</del> | <del>20</del> | <del>200</del>    | <del>10</del>     | <del>200</del> | S         | No  | No             | No          |
| Gravel Pits                      | 0              | 0             | 0                 | 0                 | 0              | No        | No  | No             | No          |
| Hartland silt loam               | <del>500</del> | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S         | S   | S              | \$          |

<sup>\*</sup>Refer to page 14 Refer to page 14S in table = Suitable

<sup>1</sup>TABLE SHOWING MAXIMUM ACCEPTABLE DISPOSAL RATES OF MANURE OR MANURE SLUDGE APPLICATION PER ACRE PER YEAR ON MAINE SOILS AND SOILS SUITABLE FOR BULK PILING, BURYING, COMPOSTING, IRRIGATION, AND LEACHING BEDS

|                                   |                   | SPREA         | ADING             |                   | IRRIG          | PILING | BURY           | COM-           | <b>LEACH</b>   |
|-----------------------------------|-------------------|---------------|-------------------|-------------------|----------------|--------|----------------|----------------|----------------|
|                                   | Cattle,           | Horse         | Poultry           | , Sheep,          | TION           |        | <del>ING</del> | POST-          | <del>ING</del> |
|                                   | Manure            | , Sludge      | Hog N             | <del>1anure</del> |                |        |                | <del>ING</del> | BEDS           |
|                                   | Lbs. <sup>2</sup> | Tons          | Lbs. <sup>2</sup> | Tons              | Lbs.           |        |                |                |                |
|                                   | Nitro-            | Manure        | Nitro-            | Manure            | Nitro-         |        |                |                |                |
|                                   | <del>gen</del>    |               | <del>gen</del>    |                   | <del>gen</del> |        |                |                |                |
| Hartland very fine sandy loam     | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S      | <del>S</del>   | S              | S              |
| Herman sandy loam                 | <del>200</del>    | <del>20</del> | <del>200</del>    | <del>10</del>     | <del>200</del> | S      | No             | No             | No             |
| Herman sandy loam (moderately     |                   |               |                   |                   |                |        |                |                |                |
| <del>deep)</del>                  | <del>100</del>    | <del>10</del> | <del>100</del>    | <del>5</del>      | <del>100</del> | S      | No             | No             | No             |
| Herman very stony sandy loam      | <del>200</del>    | <del>20</del> | <del>200</del>    | <del>10</del>     | <del>200</del> | S      | No             | No             | No             |
| Herman extremely stony sandy      | <del>200</del>    | <del>20</del> | <del>200</del>    | <del>10</del>     | <del>200</del> | S      | No             | No             | No             |
| <del>loam</del>                   |                   |               |                   |                   |                |        |                |                |                |
| Hinckley gravelly loamy sand      | <del>100</del>    | <del>10</del> | <del>100</del>    | <del>5</del>      | <del>100</del> | No     | No             | No             | No             |
| Hinckley gravelly sandy loam      | 100               | <del>10</del> | 100               | <del>5</del>      | <del>100</del> | No     | No             | No             | No             |
| Hinckley-Suffield Complex         | 100               | <del>10</del> | 100               | <del>5</del>      | <del>100</del> | No     | No             | No             | No             |
| Hollis very rocky fine sandy loam |                   |               |                   |                   |                |        |                |                |                |
|                                   | 0                 | 0             | 0                 | 0                 | 0              | No     | No             | No             | No             |
| Hollis loam                       | <del>100</del>    | <del>10</del> | <del>100</del>    | <del>5</del>      | <del>100</del> | No     | No             | No             | No             |
| Hollis very rocky loam            | 0                 | 0             | 0                 | 0                 | 0              | No     | No             | No             | No             |
| Howland loam                      | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No     | No             | No             | No             |
| Howland very stony loam           | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No     | No             | No             | No             |
| Howland gravelly loam             | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No     | No             | No             | No             |
| Leicester fine sandy loam         | 0                 | 0             | 0                 | 0                 | 0              | No     | No             | No             | No             |
| Leicester very stony fine sandy   |                   |               |                   |                   |                |        |                |                |                |
| <del>loam</del>                   | 0                 | 0             | 0                 | 0                 | 0              | No     | No             | No             | No             |
| <del>Leicester loam</del>         | 0                 | 0             | 0                 | 0                 | 0              | No     | No             | No             | No             |
| Leicester very stony loam         | 0                 | 0             | 0                 | 0                 | 0              | No     | No             | No             | No             |
| Linneus silt loam                 | 0                 | 0             | 0                 | 0                 | 0              | No     | No             | No             | No             |
| Lyman fine sandy loam             | 100               | <del>10</del> | 100               | 5                 | 100            | No     | No             | No             | No             |

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|  |                   | SPRE/               | ADING             |                   | <del>IRRIG</del> | PILING       | BURY           | COM-           | <b>LEACH</b>   |
|--|-------------------|---------------------|-------------------|-------------------|------------------|--------------|----------------|----------------|----------------|
|  | Cattle,           | Horse               | Poultry           | , Sheep,          | TION             |              | <del>ING</del> | POST-          | <del>ING</del> |
|  |                   | <del>, Sludge</del> |                   | <del>4anure</del> |                  |              |                | <del>ING</del> | <b>BEDS</b>    |
|  | Lbs. <sup>2</sup> | Tons                | Lbs. <sup>2</sup> | Tons              | <del>Lbs.</del>  |              |                |                |                |
|  | Nitro-            | Manure              | Nitro-            | Manure            | Nitro-           |              |                |                |                |
|  | <del>gen</del>    |                     | <del>gen</del>    |                   | <del>gen</del>   |              |                |                |                |
| Lyman very rocky fine sandy loam           |                   |                     |                   |                   |                  |              |                |                |                |
|  | 0                 | 0                   | 0                 | 0                 | 0                | No           | No             | No             | No             |
| <del>Lyman loam</del>                      | <del>100</del>    | <del>10</del>       | <del>100</del>    | <del>5</del>      | <del>100</del>   | No           | No             | No             | No             |
| Lyman very rocky loam                      | 0                 | 0                   | 0                 | 0                 | 0                | No           | No             | No             | No             |
| Lyman Berkshire very stony fine sandy loam | <del>100</del>    | <del>10</del>       | <del>100</del>    | 5                 | <del>100</del>   | No           | No             | No             | No             |
| Machias fine sandy loam                    | 100               | <del>10</del>       | 100               | 5                 | 100              | No           | No             | No             | No             |
| Machias gravelly fine sandy loam           | 100               | <del>10</del>       | 100               | <del>5</del>      | 100              | No           | No             | No             | No             |
| Machias gravelly loam                      | 100               | <del>10</del>       | 100               | <del>5</del>      | <del>100</del>   | No           | No             | No             | No             |
| Madawaska fine sandy loam                  | 100               | <del>10</del>       | 100               | <del>5</del>      | <del>100</del>   | No           | No             | No             | No             |
| Madawaska very fine sandy loam             | 100               | <del>10</del>       | <del>100</del>    | <del>5</del>      | <del>100</del>   | No           | No             | No             | No             |
| Made Land - cut and fill                   | 0                 | 0                   | 0                 | 0                 | 0                | No           | No             | No             | No             |
| Made Land loamy material                   | 0                 | 0                   | 0                 | 0                 | 0                | No           | No             | No             | No             |
| Made Land - soil material                  | 0                 | 0                   | 0                 | 0                 | 0                | No           | No             | No             | No             |
| Made Land                                  | 0                 | 0                   | 0                 | 0                 | 0                | No           | No             | No             | No             |
| Made Land sanitary land fill               | 0                 | 0                   | 0                 | 0                 | 0                | No           | No             | No             | No             |
| Mapleton shaly silt loam                   | 0                 | 0                   | 0                 | 0                 | 0                | No           | No             | No             | No             |
| Mapleton very rocky silt loam              | 0                 | 0                   | 0                 | 0                 | 0                | No           | No             | No             | No             |
| Marlow fine sandy loam                     | <del>500</del>    | <del>50</del>       | <del>500</del>    | <del>25</del>     | <del>500</del>   | <u>\$</u>    | <del>S</del>   | <del>S</del>   | No             |
| Marlow very stony fine sandy               | <del>500</del>    | <del>50</del>       | <del>500</del>    | <del>25</del>     | 0                | <del>S</del> | <del>2</del>   | No             | No             |
| <del>loam</del>                            |                   |                     |                   |                   |                  |              |                |                |                |
| Marlow loam                                | <del>500</del>    | <del>50</del>       | <del>500</del>    | <del>25</del>     | 0                | S            | <u>\$</u>      | No             | No             |
| Marlow very stony loam                     | <del>500</del>    | <del>50</del>       | <del>500</del>    | <del>25</del>     | <del>500</del>   | S            | S              | No             | No             |
| Marsh, fresh water                         | 0                 | .0                  | 0                 | 0                 | 0                | No           | No             | No             | No             |

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<sup>1</sup>TABLE SHOWING MAXIMUM ACCEPTABLE DISPOSAL RATES OF MANURE OR MANURE SLUDGE APPLICATION PER ACRE PER YEAR ON MAINE SOILS AND SOILS SUITABLE FOR BULK PILING, BURYING, COMPOSTING, IRRIGATION, AND LEACHING BEDS

|                                   |                   | SPRE/         | ADING             |                   | IRRIG          | PILING       | BURY         | <del>COM</del> | <b>LEACH</b> |
|-----------------------------------|-------------------|---------------|-------------------|-------------------|----------------|--------------|--------------|----------------|--------------|
|                                   | Cattle,           | Horse         | Poultry           | , Sheep,          | TION           |              | ING          | POST-          | ING          |
|                                   | Manure            | , Sludge      | Hog N             | <del>1anure</del> |                |              |              | <del>ING</del> | BEDS         |
|                                   | Lbs. <sup>2</sup> | Tons          | Lbs. <sup>2</sup> | Tons              | Lbs.           |              |              |                |              |
|                                   | Nitro-            | Manure        | Nitro-            | Manure            | Nitro-         |              |              |                |              |
|                                   | <del>gen</del>    |               | <del>gen</del>    |                   | <del>gen</del> |              |              |                |              |
| Melrose fine sandy loam           | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S            | <del>S</del> | S              | No           |
| Merrimac fine sandy loam          | <del>200</del>    | <del>20</del> | <del>200</del>    | <del>10</del>     | <del>200</del> | S            | No           | No             | No           |
| Monarda silt loam                 | 0                 | 0             | 0                 | 0                 | 0              | No           | No           | No             | No           |
| Monarda very stony silt loam      | 0                 | 0             | 0                 | 0                 | 0              | No           | No           | No             | No           |
| Monarda Burnham silt loam         | 0                 | 0             | 0                 | 0                 | 0              | No           | No           | No             | No           |
| Monarda-Burnham very stony silt   | 0                 | 0             | 0                 | 0                 | 0              | No           | No           | No             | No           |
| <del>loam</del>                   |                   |               |                   |                   |                |              |              |                |              |
| Monarda Burnham extremely         |                   |               |                   |                   |                |              |              |                |              |
| stony silt loam                   | 0                 | 0             | 0                 | 0                 | 0              | No           | No           | No             | No           |
| <del>Muck</del>                   | 0                 | 0             | 0                 | 0                 | 0              | No           | No           | No             | No           |
| Nicholville silt loam             | 100               | <del>10</del> | 100               | <del>5</del>      | <del>100</del> | No           | No           | No             | No           |
| Ninigret fine sandy loam          | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | No           | No           | No             | No           |
| Paxton fine sandy loam            | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S            | <del>S</del> | S              | No           |
| Paxton very stony fine sandy loam | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | <del>S</del> | <del>2</del> | No             | No           |
| Paxton loam                       | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | <del>S</del> | <del>2</del> | <del>S</del>   | No           |
| Paxton very stony loam            | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | <del>S</del> | <del>2</del> | No             | No           |
| Peat and Muck                     | 0                 | 0             | 0                 | 0                 | 0              | No           | No           | No             | No           |
| Peat coarsely fibrous             | 0                 | 0             | 0                 | 0                 | 0              | No           | No           | No             | No           |
| Peat moderately fibrous           | 0                 | 0             | 0                 | 0                 | 0              | No           | No           | No             | No           |
| Peat Sphagnum                     | 0                 | 0             | 0                 | 0                 | 0              | No           | No           | No             | No           |
| Perham silt loam                  | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No           | No           | No             | No           |
| Perham stony silt loam            | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No           | No           | No             | No           |
| Perham gravelly silt loam         | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No           | No           | No             | No           |

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|   |                   | SPREA         | DING              |                   | IRRIG          | PILING   | BURY                  | <del>COM</del> | LEACH                 |
|---|-------------------|---------------|-------------------|-------------------|----------------|----------|-----------------------|----------------|-----------------------|
|   | Cattle,           | Horse         | Poultry           | , Sheep,          | TION           |          | <del>ING</del>        | POST-          | <del>ING</del>        |
|   |                   | , Sludge      |                   | <del>Aanure</del> |                |          |                       | <del>ING</del> | <b>BEDS</b>           |
|   | Lbs. <sup>2</sup> | Tons          | Lbs. <sup>2</sup> | Tons              | Lbs.           |          |                       |                |                       |
|   | Nitro-            | Manure        | Nitro-            | Manure            | Nitro-         |          |                       |                |                       |
|   | <del>gen</del>    |               | <del>gen</del>    |                   | gen            |          |                       |                |                       |
| Peru fine sandy loam                    | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No       | No                    | No             | No                    |
| Peru very stony fine sandy loam         |                   |               |                   |                   |                |          |                       |                |                       |
|   | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No       | No                    | No             | No                    |
| <del>Peru loam</del>                    | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No       | No                    | No             | No                    |
| Peru very stony loam                    | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No       | No                    | No             | No                    |
| Plaisted loam                           | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S        | <del>S</del>          | S              | No                    |
| Plaisted gravelly loam                  | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S        | <del>S</del>          | S              | No                    |
| Plaisted very stony loam                | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S        | S                     | No             | No                    |
| Plaisted extremely stony loam           | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S        | S                     | No             | No                    |
| Plaisted & Howland very stony           |                   |               |                   |                   |                |          |                       |                |                       |
| <del>loam</del>                         | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del>     | <del>300</del> | No       | No                    | No             | No                    |
| Potsdam fine sandy loam                 | <del>500</del>    | <del>50</del> | <del>500</del>    | <del>25</del>     | <del>500</del> | S        | \$                    | S              | No                    |
| Raynham silt loam                       | 0                 | 0             | 0                 | 0                 | 0              | No       | No                    | No             | No                    |
| Red Hook loam                           | 0                 | 0             | 0                 | 0                 | 0              | No       | No                    | No             | No                    |
| Red Hook Atherton fine sandy            |                   |               |                   |                   |                |          |                       |                |                       |
| <del>loam</del>                         | 0                 | 0             | 0                 | 0                 | 0              | No       | No                    | No             | No                    |
| Red Hook-Atherton silt loam             | 0                 | 0             | 0                 | 0                 | 0              | No       | No                    | No             | No                    |
| Ridgebury fine sandy loam               | 0                 | 0             | 0                 | 0                 | 0              | No       | No                    | No             | No                    |
| Ridgebury very stony fine sandy         | 0                 | 0             | 0                 | 0                 | 0              | No       | No                    | No             | No                    |
| loam<br>Riverwash                       | 0                 | 0             | 0                 | 0                 | 0              | No       | Mo                    | No             | No                    |
| Rockland                                | 0                 | 0             | 0                 | 0                 | 0              | No.      | No<br>No              | No<br>No       | No                    |
| Rockland, Canaan Mat. Str.              | 0                 | 0             | 0                 | 0                 | 0              | No<br>No | No<br>No              | No No          | No                    |
| *                                       | ↔                 | 0             | 0                 | 0                 | 0              | 190      | <del>1<b>VO</b></del> | <del>170</del> | <del>1<b>VO</b></del> |
| Sloping  Roaldand Conson Lyman material | 0                 | 0             | 0                 | 0                 | 0              | No       | No                    | No             | No                    |
| Rockland, Canaan-Lyman material         |                   | 0             | 0                 | 0                 | 0              |          |                       |                |                       |
| Rockland, Hollis soil material          | 0                 | 0             | 0                 | 0                 | 0              | No       | No                    | No             | No                    |

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|                               |                   | SPRE/               | DING              |                   | IRRIG-         | <b>PILING</b> | <b>BURY</b>    | COM-           | <b>LEACH</b>   |
|-------------------------------|-------------------|---------------------|-------------------|-------------------|----------------|---------------|----------------|----------------|----------------|
|                               | Cattle,           | Horse               | Poultry           | , Sheep,          | TION           |               | <del>ING</del> | POST-          | <del>ING</del> |
|                               | Manure            | <del>, Sludge</del> |                   | <del>1anure</del> |                |               |                | <del>ING</del> | BEDS           |
|                               | Lbs. <sup>2</sup> | Tons                | Lbs. <sup>2</sup> | Tons              | Lbs.           |               |                |                |                |
|                               | Nitro-            | Manure              | Nitro-            | Manure            | Nitro-         |               |                |                |                |
|                               | <del>gen</del>    |                     | <del>gen</del>    |                   | <del>gen</del> |               |                |                |                |
| Rockland, Hollis Thorndike    | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| <del>material</del>           |                   |                     |                   |                   |                |               |                |                |                |
| Rockland Thorndike material   | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Rockland Canaan soil material |                   |                     |                   |                   |                |               |                |                |                |
|                               | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Rockland, Thorndike, Lyman    | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| <del>material</del>           |                   |                     |                   |                   |                |               |                |                |                |
| Rock outcrop                  | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Rubble land                   | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Salmon silt loam              | <del>500</del>    | <del>50</del>       | <del>500</del>    | <del>25</del>     | <del>500</del> | S             | <del>5</del>   | S              | 8              |
| Saugatuck loamy sand          | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Scantic silt loam             | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Scantic very stony silt loam  | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Scarboro fine sandy loam      | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Scarboro sandy loam           | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Sebago mucky peat             | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Skowhegan loamy fine sand     | 100               | <del>10</del>       | 100               | <del>5</del>      | <del>100</del> | No            | No             | No             | No             |
| Stetson sandy loam            | <del>200</del>    | <del>20</del>       | 200               | <del>10</del>     | <del>200</del> | S             | No             | No             | No             |
| Stetson fine sandy loam       | <del>200</del>    | <del>20</del>       | <del>200</del>    | <del>10</del>     | <del>200</del> | S             | No             | No             | No             |
| Stetson gravelly loam         | <del>200</del>    | <del>20</del>       | 200               | <del>10</del>     | <del>200</del> | S             | No             | No             | No             |
| Stetson Suffield complex      | <del>200</del>    | <del>20</del>       | 200               | <del>10</del>     | <del>200</del> | S             | No             | No             | No             |
| Stony land                    | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Stony land Herman material    | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |
| Stony land - Paxton material  | 0                 | 0                   | 0                 | 0                 | 0              | No            | No             | No             | No             |

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<sup>1</sup>TABLE SHOWING MAXIMUM ACCEPTABLE DISPOSAL RATES OF MANURE OR MANURE SLUDGE APPLICATION PER ACRE PER YEAR ON MAINE SOILS AND SOILS SUITABLE FOR BULK PILING, BURYING, COMPOSTING, IRRIGATION, AND LEACHING BEDS

|                                   |                   | SPRE/               | DING              |                   | IRRIG          | PILING | BURY           | COM-      | <b>LEACH</b>   |
|-----------------------------------|-------------------|---------------------|-------------------|-------------------|----------------|--------|----------------|-----------|----------------|
|                                   |                   | Horse               |                   | , Sheep,          | TION           |        | <del>ING</del> | POST-     | <del>ING</del> |
|                                   |                   | <del>, Sludge</del> | Hog N             | <del>1anure</del> |                |        |                | ING       | BEDS           |
|                                   | Lbs. <sup>2</sup> | Tons                | Lbs. <sup>2</sup> | Tons              | Lbs.           |        |                |           |                |
|                                   | Nitro-            | Manure              | Nitro-            | Manure            | Nitro-         |        |                |           |                |
|                                   | <del>gen</del>    |                     | <del>gen</del>    |                   | <del>gen</del> |        |                |           |                |
| Stony land Plaisted material      | 0                 | 0                   | 0                 | 0                 | 0              | No     | No             | No        | No             |
| Sudbury sandy loam                | <del>100</del>    | <del>10</del>       | <del>100</del>    | <del>5</del>      | <del>100</del> | No     | No             | No        | No             |
| Sudbury fine sandy loam           | <del>100</del>    | <del>10</del>       | <del>100</del>    | <del>5</del>      | <del>100</del> | No     | No             | No        | No             |
| Suffield silt loam                | <del>500</del>    | <del>50</del>       | <del>500</del>    | <del>25</del>     | <del>500</del> | S      | <del>S</del>   | <u>\$</u> | No             |
| Suffield very fine sandy loam     | <del>500</del>    | <del>50</del>       | <del>500</del>    | <del>25</del>     | <del>500</del> | S      | <del>S</del>   | S         | No             |
| Sutton loam                       | <del>300</del>    | <del>30</del>       | <del>300</del>    | <del>15</del>     | <del>300</del> | No     | No             | No        | No             |
| Sutton fine sandy loam            | <del>300</del>    | <del>30</del>       | <del>300</del>    | <del>15</del>     | <del>300</del> | No     | No             | No        | No             |
| Sutton very stony loam            | <del>300</del>    | <del>30</del>       | <del>300</del>    | <del>15</del>     | <del>300</del> | No     | No             | No        | No             |
| Sutton very stony fine sandy loam | <del>300</del>    | <del>30</del>       | <del>300</del>    | <del>15</del>     | <del>300</del> | No     | No             | No        | No             |
| Swanton fine sandy loam           |                   | 0                   | 0                 | 0                 | 0              | No     | No             | No        | No             |
| Thorndike silt loam               | <del>200</del>    | <del>20</del>       | <del>200</del>    | <del>10</del>     | <del>200</del> | No     | No             | No        | No             |
| Thorndike shaly silt loam         | <del>200</del>    | <del>20</del>       | <del>200</del>    | <del>10</del>     | <del>200</del> | No     | No             | No        | No             |
| Thorndike very rocky silt loam    | 0                 | 0                   | 0                 | 0                 | 0              | No     | No             | No        | No             |
| Thorndike very stony silt loam    | <del>200</del>    | <del>20</del>       | <del>200</del>    | <del>10</del>     | <del>200</del> |        |                |           |                |
|                                   |                   |                     |                   |                   |                | No     | No             | No        | No             |
| Thorndike extremely rocky silt    | 0                 | 0                   | 0                 | 0                 | 0              | No     | No             | No        | No             |
| <del>loam</del>                   |                   |                     |                   |                   |                |        |                |           |                |
| Thorndike Bangor silt loam        | <del>200</del>    | <del>20</del>       | <del>200</del>    | <del>10</del>     | <del>200</del> | No     | No             | No        | No             |
| Thornton & Howland soils          | <del>200</del>    | <del>20</del>       | <del>200</del>    | <del>10</del>     | <del>200</del> | No     | No             | No        | No             |
| Thorndike Plaisted loam           | <del>200</del>    | <del>20</del>       | <del>200</del>    | <del>10</del>     | <del>200</del> | No     | No             | No        | No             |
| Tidal Marsh                       | 0                 | 0                   | 0                 | 0                 | 0              | No     | No             | No        | No             |
| Walpole sandy loam                | 0                 | 0                   | 0                 | 0                 | 0              | No     | No             | No        | No             |
| Walpole fine sandy loam           | 0                 | 0                   | 0                 | 0                 | 0              | No     | No             | No        | No             |

<sup>&</sup>lt;sup>1</sup>Refer to page 14
<sup>2</sup>Refer to page 14
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|                                  | SPREADING         |               |                   |               | IRRIG          | PILING  | BURY           | COM-           | LEACH          |
|----------------------------------|-------------------|---------------|-------------------|---------------|----------------|---------|----------------|----------------|----------------|
|                                  |                   |               |                   |               | ł              | FILLING |                |                |                |
|                                  | Cattle, Horse     |               | Poultry, Sheep,   |               | TION           |         | <del>ING</del> | POST -         | <del>ING</del> |
|                                  | Manure, Sludge    |               | Hog Manure        |               |                |         |                | <del>ING</del> | <b>BEDS</b>    |
|                                  | Lbs. <sup>2</sup> | Tons          | Lbs. <sup>2</sup> | Tons          | Lbs.           |         |                |                |                |
|                                  | Nitro-            | Manure        | Nitro-            | Manure        | Nitro-         |         |                |                |                |
|                                  | <del>gen</del>    |               | <del>gen</del>    |               | <del>gen</del> |         |                |                |                |
| Waumbek sandy loam               | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del> | <del>300</del> | No      | No             | No             | No             |
| Waumbek very stony sandy loam    | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del> | <del>300</del> | No      | No             | No             | No             |
| Whately fine sandy loam          | 0                 | 0             | 0                 | 0             | 0              | No      | No             | No             | No             |
| Whitman loam                     | 0                 | 0             | 0                 | 0             | 0              | No      | No             | No             | No             |
| Whitman fine sandy loam          | 0                 | 0             | 0                 | 0             | 0              | No      | No             | No             | No             |
| Windsor loamy sand               | <del>100</del>    | <del>10</del> | <del>100</del>    | <del>5</del>  | <del>100</del> | No      | No             | No             | No             |
| Woodbridge loam                  | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del> | <del>300</del> | No      | No             | No             | No             |
| Woodbridge very stony loam       | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del> | <del>300</del> | No      | No             | No             | No             |
| Woodbridge fine sandy loam       | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del> | <del>300</del> | No      | No             | No             | No             |
| Woodbridge very stony fine sandy | <del>300</del>    | <del>30</del> | <del>300</del>    | <del>15</del> | <del>300</del> | No      | No             | No             | No             |
| <del>loam</del>                  |                   |               |                   |               |                |         |                |                |                |

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